

# Harness

## Mating harness

Model	Harness model #		
	Input	Output	
LHA30F	H-IN-5 or H-IN-10	H-OU-9	
LHA50F		H-OU-9	
LHA75F		H-OU-18	
LHA100F		H-OU-18	
LHA150F, LHP150F		H-OU-18	
LHA300F, LHP300F		H-OU-46	
*LHP300F		H-OU-10	
LCA10S		H-OU-54	
LCA15S		H-IN-4	H-OU-7
LCA30S		H-IN-4	H-OU-8
LCA50S, LGA50A	H-IN-5 or H-IN-10	H-OU-9	
LCA75S, LGA75A		H-OU-18	
LCA100S, LGA100A		H-OU-10	
LCA150S, LGA150A		H-OU-11	
*LGA150A		H-OU-12	
*LGA240A, *LFA300F, *LFP300F		H-IN-14	H-OU-11
SNA-01-.03	H-OU-8	H-OU-8	
SNA-06	H-OU-9	H-OU-9	
SNR-10	H-OU-18	H-OU-18	

Model	Harness model #		
	Input	Output	
LDA10F	H-IN-5 or H-IN-10	H-OU-8	
LDA15F		H-OU-8	
LDA30F, *LFA30F		H-OU-9	
LDA50F, LEA50F, *LFA50F		H-OU-9	
LDA75F, LEA75F, *LFA75F		H-OU-18	
LDA100W, LEA100F, *LFP100F, *LFA100F		H-OU-10	
*LMA100F, LEP100F, 150F, 240F		H-OU-11	
LDA150W, LEA150F, *LFP150F, *LFA150F, *LFA240F, *LFP240F, *LMA150F, *LMA240F		H-OU-12	
*LFA10F		H-OU-34	
*LFA15F		H-OU-34	
*LDA300W		H-IN-7	H-OU-22

- \* Optional : connector type "-J" (LDA300W)
- \* Optional : connector type "-J1" (LGA50A, 75A, 100A, 150A, 240A)
- \* Optional : connector type "-J1" (LFA100F, 150F, 300F, 500F, 750F, 1000F, 1500F, 2400F, 3000F)
- \* Optional : connector type "-J1" (LFP100F, 150F, 240F, 300F)
- \* Optional : connector type "-J1" (LMA100F, 150F, 240F)
- \* Optional : connector type "-J5" (LHA300F)
- \* Optional : connector type "-J5" (LHP300F)

LCA Series  
LDA Series  
LGA Series  
LEA Series  
LEP Series  
LFA Series  
LFP Series  
LHA Series  
LHP Series  
LMA Series  
SNA Series  
SNR Series

<p>● Model number <b>H-IN-4</b> Housing : XHP-7 (J.S.T.) Pin : SXH-001T-P0.6 (J.S.T.) Weight : 10g max</p>	<p>● Type</p>	<p>● Wire</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr><td>1</td><td>UL1007</td><td>22</td><td>black</td><td>500</td></tr> <tr><td>2, 3</td><td></td><td></td><td></td><td></td></tr> <tr><td>4</td><td>UL1007</td><td>22</td><td>white</td><td>500</td></tr> <tr><td>5, 6</td><td></td><td></td><td></td><td></td></tr> <tr><td>7</td><td>UL1007</td><td>22</td><td>green</td><td>500</td></tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1007	22	black	500	2, 3					4	UL1007	22	white	500	5, 6					7	UL1007	22	green	500
Pin #	Wire	AWG	Color	Length ℓ (mm)																												
1	UL1007	22	black	500																												
2, 3																																
4	UL1007	22	white	500																												
5, 6																																
7	UL1007	22	green	500																												
<p>● Model number <b>H-IN-5</b> Housing : VHR-5N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 30g max</p>	<p>● Type</p>	<p>● Wire</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr><td>1</td><td>UL1015</td><td>18</td><td>black</td><td>500</td></tr> <tr><td>2</td><td></td><td></td><td></td><td></td></tr> <tr><td>3</td><td>UL1015</td><td>18</td><td>white</td><td>500</td></tr> <tr><td>4</td><td></td><td></td><td></td><td></td></tr> <tr><td>5</td><td>UL1015</td><td>18</td><td>green</td><td>500</td></tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1015	18	black	500	2					3	UL1015	18	white	500	4					5	UL1015	18	green	500
Pin #	Wire	AWG	Color	Length ℓ (mm)																												
1	UL1015	18	black	500																												
2																																
3	UL1015	18	white	500																												
4																																
5	UL1015	18	green	500																												
<p>● Model number <b>H-IN-7</b> Housing : 1-178128-5 (Tyco Electronics) Pin : 1-175218-2 or 1-175218-3 (Tyco Electronics) Weight : 35g max</p>	<p>● Type</p>	<p>● Wire</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr><td>1</td><td>UL1015</td><td>18</td><td>white</td><td>500</td></tr> <tr><td>2</td><td></td><td></td><td></td><td></td></tr> <tr><td>3</td><td>UL1015</td><td>18</td><td>black</td><td>500</td></tr> <tr><td>4</td><td></td><td></td><td></td><td></td></tr> <tr><td>5</td><td>UL1015</td><td>18</td><td>green/yellow</td><td>500</td></tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1015	18	white	500	2					3	UL1015	18	black	500	4					5	UL1015	18	green/yellow	500
Pin #	Wire	AWG	Color	Length ℓ (mm)																												
1	UL1015	18	white	500																												
2																																
3	UL1015	18	black	500																												
4																																
5	UL1015	18	green/yellow	500																												
<p>● Model number <b>H-IN-10</b> Housing : VHR-5N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 30g max</p>	<p>● Type</p>	<p>● Wire</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr><td>1</td><td>UL1015</td><td>18</td><td>black</td><td>500</td></tr> <tr><td>2</td><td></td><td></td><td></td><td></td></tr> <tr><td>3</td><td>UL1015</td><td>18</td><td>white</td><td>500</td></tr> <tr><td>4</td><td></td><td></td><td></td><td></td></tr> <tr><td>5</td><td>UL1015</td><td>18</td><td>green/yellow</td><td>500</td></tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1015	18	black	500	2					3	UL1015	18	white	500	4					5	UL1015	18	green/yellow	500
Pin #	Wire	AWG	Color	Length ℓ (mm)																												
1	UL1015	18	black	500																												
2																																
3	UL1015	18	white	500																												
4																																
5	UL1015	18	green/yellow	500																												
<p>● Model number <b>H-IN-14</b> Housing : VHR-8N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 60g max</p>	<p>● Type</p>	<p>● Wire</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr><td>1, 2</td><td>UL1015</td><td>18</td><td>black</td><td>500</td></tr> <tr><td>3</td><td></td><td></td><td></td><td></td></tr> <tr><td>4, 5</td><td>UL1015</td><td>18</td><td>white</td><td>500</td></tr> <tr><td>6</td><td></td><td></td><td></td><td></td></tr> <tr><td>7, 8</td><td>UL1015</td><td>18</td><td>green</td><td>500</td></tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1, 2	UL1015	18	black	500	3					4, 5	UL1015	18	white	500	6					7, 8	UL1015	18	green	500
Pin #	Wire	AWG	Color	Length ℓ (mm)																												
1, 2	UL1015	18	black	500																												
3																																
4, 5	UL1015	18	white	500																												
6																																
7, 8	UL1015	18	green	500																												
<p>● Model number <b>H-OU-7</b> Housing : XHP-2 (J.S.T.) Pin : SXH-001T-P0.6 (J.S.T.) Weight : 7g max</p>	<p>● Type</p>	<p>● Wire</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr><td>1</td><td>UL1007</td><td>22</td><td>black</td><td>500</td></tr> <tr><td>2</td><td>UL1007</td><td>22</td><td>red</td><td>500</td></tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1007	22	black	500	2	UL1007	22	red	500															
Pin #	Wire	AWG	Color	Length ℓ (mm)																												
1	UL1007	22	black	500																												
2	UL1007	22	red	500																												
<p>● Model number <b>H-OU-8</b> Housing : XHP-4 (J.S.T.) Pin : SXH-001T-P0.6 (J.S.T.) Weight : 15g max</p>	<p>● Type</p>	<p>● Wire</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr><td>1</td><td>UL1007</td><td>22</td><td>black</td><td>500</td></tr> <tr><td>2</td><td>UL1007</td><td>22</td><td>black</td><td>500</td></tr> <tr><td>3</td><td>UL1007</td><td>22</td><td>red</td><td>500</td></tr> <tr><td>4</td><td>UL1007</td><td>22</td><td>red</td><td>500</td></tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1007	22	black	500	2	UL1007	22	black	500	3	UL1007	22	red	500	4	UL1007	22	red	500					
Pin #	Wire	AWG	Color	Length ℓ (mm)																												
1	UL1007	22	black	500																												
2	UL1007	22	black	500																												
3	UL1007	22	red	500																												
4	UL1007	22	red	500																												

<p>●Model number <b>H-OU-9</b> Housing : VHR-4N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 40g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>2</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>3</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> <tr> <td>4</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1015	18	black	500	2	UL1015	18	black	500	3	UL1015	18	red	500	4	UL1015	18	red	500
Pin #	Wire	AWG	Color	Length ℓ (mm)																							
1	UL1015	18	black	500																							
2	UL1015	18	black	500																							
3	UL1015	18	red	500																							
4	UL1015	18	red	500																							
<p>●Model number <b>H-OU-10</b> Housing : VHR-8N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 80g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1 - 4</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>5 - 8</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1 - 4	UL1015	18	black	500	5 - 8	UL1015	18	red	500										
Pin #	Wire	AWG	Color	Length ℓ (mm)																							
1 - 4	UL1015	18	black	500																							
5 - 8	UL1015	18	red	500																							
<p>●Model number <b>H-OU-11</b> Housing : VHR-6N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 60g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1 - 6</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1 - 6	UL1015	18	red	500															
Pin #	Wire	AWG	Color	Length ℓ (mm)																							
1 - 6	UL1015	18	red	500																							
<p>●Model number <b>H-OU-12</b> Housing : VHR-7N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 70g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1 - 7</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1 - 7	UL1015	18	black	500															
Pin #	Wire	AWG	Color	Length ℓ (mm)																							
1 - 7	UL1015	18	black	500																							
<p>●Model number <b>H-OU-18</b> Housing : VHR-6N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 60g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1 - 3</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>4 - 6</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1 - 3	UL1015	18	black	500	4 - 6	UL1015	18	red	500										
Pin #	Wire	AWG	Color	Length ℓ (mm)																							
1 - 3	UL1015	18	black	500																							
4 - 6	UL1015	18	red	500																							
<p>●Model number <b>H-OU-22</b> Housing : 1-178288-8 (Tyco Electronics) Pin : 1-175218-2 or 1-175218-3 (Tyco Electronics) Weight : 100g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1 - 5</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>6 - 10</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1 - 5	UL1015	18	black	500	6 - 10	UL1015	18	red	500										
Pin #	Wire	AWG	Color	Length ℓ (mm)																							
1 - 5	UL1015	18	black	500																							
6 - 10	UL1015	18	red	500																							
<p>●Model number <b>H-OU-34</b> Housing : VHR-2N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 20g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>2</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1015	18	black	500	2	UL1015	18	red	500										
Pin #	Wire	AWG	Color	Length ℓ (mm)																							
1	UL1015	18	black	500																							
2	UL1015	18	red	500																							
<p>●Model number <b>H-OU-46</b> Housing : VHR-10N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 100g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1 - 5</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>6 - 10</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1 - 5	UL1015	18	black	500	6 - 10	UL1015	18	red	500										
Pin #	Wire	AWG	Color	Length ℓ (mm)																							
1 - 5	UL1015	18	black	500																							
6 - 10	UL1015	18	red	500																							
<p>●Model number <b>H-OU-54</b> Housing : VHR-8N (J.S.T.) Pin : SVH-41T-P1.1 (J.S.T.) Weight : 100g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1 - 4</td> <td>UL1430</td> <td>16</td> <td>black</td> <td>500</td> </tr> <tr> <td>5 - 8</td> <td>UL1430</td> <td>16</td> <td>red</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1 - 4	UL1430	16	black	500	5 - 8	UL1430	16	red	500										
Pin #	Wire	AWG	Color	Length ℓ (mm)																							
1 - 4	UL1430	16	black	500																							
5 - 8	UL1430	16	red	500																							

Mating harness

Model	Harness model #	
	Input	Output
LFA10F	H-IN-12	H-OU-33
LFA15F		H-OU-33
LFA30F, *LHA30F		H-OU-28
LFA50F, LGA50A, *LHA50F		H-OU-28
LFA75F, LGA75A, *LHA75F, *LHA100F, *LHA150F, *LHP150F		H-OU-29
LFP100F, LFA100F, LGA100A, LMA100F		H-OU-30
LFP150F, LFA150F, LGA150A, LFA240F, LFP240F, LMA150F, LMA240F		H-OU-31
		H-OU-32
*LHA300F, *LHP300F		H-OU-47
LGA240A, LFA300F, LFP300F	H-IN-13	H-OU-31
		H-OU-32

LGA Series  
LFA Series  
LFP Series  
LHA Series  
LHP Series  
LMA Series

\*Optional:connector type "-J4"  
(LHA30F,50F,75F,100F,150F,300F)  
\*Optional:connector type "-J4"  
(LHP150F,300F)

<p>●Model number <b>H-IN-12</b> Housing : 1-1123722-5 (Tyco Electronics) Pin : 1123721-1 or 1318912-1 (Tyco Electronics) Weight : 30g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length <math>l</math> (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>UL1015</td> <td>18</td> <td>white</td> <td>500</td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>UL1015</td> <td>18</td> <td>green</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length $l$ (mm)	1	UL1015	18	black	500	2					3	UL1015	18	white	500	4					5	UL1015	18	green	500
Pin #	Wire	AWG	Color	Length $l$ (mm)																												
1	UL1015	18	black	500																												
2																																
3	UL1015	18	white	500																												
4																																
5	UL1015	18	green	500																												
<p>●Model number <b>H-IN-13</b> Housing : 1-1123722-8 (Tyco Electronics) Pin : 1123721-1 or 1318912-1 (Tyco Electronics) Weight : 55g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length <math>l</math> (mm)</th> </tr> </thead> <tbody> <tr> <td>1,2</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>3</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4,5</td> <td>UL1015</td> <td>18</td> <td>white</td> <td>500</td> </tr> <tr> <td>6</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>7,8</td> <td>UL1015</td> <td>18</td> <td>green</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length $l$ (mm)	1,2	UL1015	18	black	500	3					4,5	UL1015	18	white	500	6					7,8	UL1015	18	green	500
Pin #	Wire	AWG	Color	Length $l$ (mm)																												
1,2	UL1015	18	black	500																												
3																																
4,5	UL1015	18	white	500																												
6																																
7,8	UL1015	18	green	500																												
<p>●Model number <b>H-OU-28</b> Housing : 1-1123722-4 (Tyco Electronics) Pin : 1123721-1 or 1318912-1 (Tyco Electronics) Weight : 40g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length <math>l</math> (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>2</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>3</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> <tr> <td>4</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length $l$ (mm)	1	UL1015	18	black	500	2	UL1015	18	black	500	3	UL1015	18	red	500	4	UL1015	18	red	500					
Pin #	Wire	AWG	Color	Length $l$ (mm)																												
1	UL1015	18	black	500																												
2	UL1015	18	black	500																												
3	UL1015	18	red	500																												
4	UL1015	18	red	500																												
<p>●Model number <b>H-OU-29</b> Housing : 1-1123722-6 (Tyco Electronics) Pin : 1123721-1 or 1318912-1 (Tyco Electronics) Weight : 60g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length <math>l</math> (mm)</th> </tr> </thead> <tbody> <tr> <td>1 - 3</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>4 - 6</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length $l$ (mm)	1 - 3	UL1015	18	black	500	4 - 6	UL1015	18	red	500															
Pin #	Wire	AWG	Color	Length $l$ (mm)																												
1 - 3	UL1015	18	black	500																												
4 - 6	UL1015	18	red	500																												
<p>●Model number <b>H-OU-30</b> Housing : 1-1123722-8 (Tyco Electronics) Pin : 1123721-1 or 1318912-1 (Tyco Electronics) Weight : 75g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length <math>l</math> (mm)</th> </tr> </thead> <tbody> <tr> <td>1 - 4</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>5 - 8</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length $l$ (mm)	1 - 4	UL1015	18	black	500	5 - 8	UL1015	18	red	500															
Pin #	Wire	AWG	Color	Length $l$ (mm)																												
1 - 4	UL1015	18	black	500																												
5 - 8	UL1015	18	red	500																												
<p>●Model number <b>H-OU-31</b> Housing : 1-1123722-6 (Tyco Electronics) Pin : 1123721-1 or 1318912-1 (Tyco Electronics) Weight : 60g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length <math>l</math> (mm)</th> </tr> </thead> <tbody> <tr> <td>1 - 6</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length $l$ (mm)	1 - 6	UL1015	18	red	500																				
Pin #	Wire	AWG	Color	Length $l$ (mm)																												
1 - 6	UL1015	18	red	500																												

<p>●Model number <b>H-OU-32</b> Housing : 1-1123722-7 (Tyco Electronics) Pin : 1123721-1 or 1318912-1 (Tyco Electronics) Weight : 70g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length <math>l</math> (mm)</th> </tr> </thead> <tbody> <tr> <td>1 - 7</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length $l$ (mm)	1 - 7	UL1015	18	black	500					
Pin #	Wire	AWG	Color	Length $l$ (mm)													
1 - 7	UL1015	18	black	500													
<p>●Model number <b>H-OU-33</b> Housing : 1-1123722-2 (Tyco Electronics) Pin : 1123721-1 or 1318912-1 (Tyco Electronics) Weight : 20g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length <math>l</math> (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>2</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length $l$ (mm)	1	UL1015	18	black	500	2	UL1015	18	red	500
Pin #	Wire	AWG	Color	Length $l$ (mm)													
1	UL1015	18	black	500													
2	UL1015	18	red	500													
<p>●Model number <b>H-OU-47</b> Housing : 1-1123722-0 (Tyco Electronics) Pin : 1123721-1 or 1318912-1 (Tyco Electronics) Weight : 100g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length <math>l</math> (mm)</th> </tr> </thead> <tbody> <tr> <td>1 - 5</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>6 - 10</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length $l$ (mm)	1 - 5	UL1015	18	black	500	6 - 10	UL1015	18	red	500
Pin #	Wire	AWG	Color	Length $l$ (mm)													
1 - 5	UL1015	18	black	500													
6 - 10	UL1015	18	red	500													

## LFP Series

Harness for connecting the external capacitor unit is prepared for LFP240/300F(U1 type).

<p>●Model number <b>H-IN-23</b> Housing : VHR-4N(J.S.T.) Pin : SVH-21T-P1.1(J.S.T.) Weight : 5g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length <math>l</math> (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>UL1015</td> <td>20</td> <td>black</td> <td>100</td> </tr> <tr> <td>3</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td>UL1015</td> <td>20</td> <td>red</td> <td>100</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length $l$ (mm)	1					2	UL1015	20	black	100	3					4	UL1015	20	red	100
Pin #	Wire	AWG	Color	Length $l$ (mm)																							
1																											
2	UL1015	20	black	100																							
3																											
4	UL1015	20	red	100																							

## LHA Series LHP Series

Harness for connecting the external capacitor unit is prepared for LHA150F/300F and LHP150F/300F (U1 type).

<p>●Model number <b>H-IN-25</b> CN A: Housing : VHR-3N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) CN B: Housing : VHR-4N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 5g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length <math>l</math> (mm)</th> </tr> </thead> <tbody> <tr> <td rowspan="3">CN A</td> <td>1</td> <td>UL1015</td> <td>20</td> <td>black</td> <td>100</td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>UL1015</td> <td>20</td> <td>red</td> <td>100</td> </tr> <tr> <td rowspan="4">CN B</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>UL1015</td> <td>20</td> <td>black</td> <td>100</td> </tr> <tr> <td>3</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td>UL1015</td> <td>20</td> <td>red</td> <td>100</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length $l$ (mm)	CN A	1	UL1015	20	black	100	2					3	UL1015	20	red	100	CN B	1					2	UL1015	20	black	100	3					4	UL1015	20	red	100
Pin #	Wire	AWG	Color	Length $l$ (mm)																																								
CN A	1	UL1015	20	black	100																																							
	2																																											
	3	UL1015	20	red	100																																							
CN B	1																																											
	2	UL1015	20	black	100																																							
	3																																											
	4	UL1015	20	red	100																																							

Mating harness

LEB Series  
LDC Series

Model	Harness model #		
	Input	Output	Option: -Z □
LEB100F	H-IN-5 or H-IN-10	H-OU-23	H-OU-25
LEB150F		H-OU-23	
LEB225F		H-OU-24	

Model	Harness model #	
	Input	Output
LDC15F	H-IN-5 or H-IN-10	H-OU-13
LDC30F		H-OU-14
LDC60F		H-OU-19

<p>●Model number</p> <h2>H-IN-5</h2> <p>Housing : VHR-5N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 30g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length <math>l</math> (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>UL1015</td> <td>18</td> <td>white</td> <td>500</td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>UL1015</td> <td>18</td> <td>green</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length $l$ (mm)	1	UL1015	18	black	500	2					3	UL1015	18	white	500	4					5	UL1015	18	green	500
Pin #	Wire	AWG	Color	Length $l$ (mm)																												
1	UL1015	18	black	500																												
2																																
3	UL1015	18	white	500																												
4																																
5	UL1015	18	green	500																												
<p>●Model number</p> <h2>H-IN-10</h2> <p>Housing : VHR-5N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 30g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length <math>l</math> (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>UL1015</td> <td>18</td> <td>white</td> <td>500</td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>UL1015</td> <td>18</td> <td>green/yellow</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length $l$ (mm)	1	UL1015	18	black	500	2					3	UL1015	18	white	500	4					5	UL1015	18	green/yellow	500
Pin #	Wire	AWG	Color	Length $l$ (mm)																												
1	UL1015	18	black	500																												
2																																
3	UL1015	18	white	500																												
4																																
5	UL1015	18	green/yellow	500																												
<p>●Model number</p> <h2>H-OU-13</h2> <p>Housing : XHP-8 (J.S.T.) Pin : SXH-001T-P0.6 (J.S.T.) Weight : 25g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length <math>l</math> (mm)</th> </tr> </thead> <tbody> <tr> <td>1, 2</td> <td>UL1007</td> <td>22</td> <td>red</td> <td>500</td> </tr> <tr> <td>3, 4</td> <td>UL1007</td> <td>22</td> <td>black</td> <td>500</td> </tr> <tr> <td>5</td> <td>UL1007</td> <td>22</td> <td>orange</td> <td>500</td> </tr> <tr> <td>6, 7</td> <td>UL1007</td> <td>22</td> <td>gray</td> <td>500</td> </tr> <tr> <td>8</td> <td>UL1007</td> <td>22</td> <td>purple</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length $l$ (mm)	1, 2	UL1007	22	red	500	3, 4	UL1007	22	black	500	5	UL1007	22	orange	500	6, 7	UL1007	22	gray	500	8	UL1007	22	purple	500
Pin #	Wire	AWG	Color	Length $l$ (mm)																												
1, 2	UL1007	22	red	500																												
3, 4	UL1007	22	black	500																												
5	UL1007	22	orange	500																												
6, 7	UL1007	22	gray	500																												
8	UL1007	22	purple	500																												
<p>●Model number</p> <h2>H-OU-14</h2> <p>Housing : VHR-6N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 60g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length <math>l</math> (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1015</td> <td>18</td> <td>purple</td> <td>500</td> </tr> <tr> <td>2, 3</td> <td>UL1015</td> <td>18</td> <td>gray</td> <td>500</td> </tr> <tr> <td>4</td> <td>UL1015</td> <td>18</td> <td>orange</td> <td>500</td> </tr> <tr> <td>5</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>6</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length $l$ (mm)	1	UL1015	18	purple	500	2, 3	UL1015	18	gray	500	4	UL1015	18	orange	500	5	UL1015	18	black	500	6	UL1015	18	red	500
Pin #	Wire	AWG	Color	Length $l$ (mm)																												
1	UL1015	18	purple	500																												
2, 3	UL1015	18	gray	500																												
4	UL1015	18	orange	500																												
5	UL1015	18	black	500																												
6	UL1015	18	red	500																												
<p>●Model number</p> <h2>H-OU-19</h2> <p>Housing : VHR-8N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 80g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length <math>l</math> (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1015</td> <td>18</td> <td>purple</td> <td>500</td> </tr> <tr> <td>2, 3</td> <td>UL1015</td> <td>18</td> <td>gray</td> <td>500</td> </tr> <tr> <td>4</td> <td>UL1015</td> <td>18</td> <td>orange</td> <td>500</td> </tr> <tr> <td>5, 6</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>7, 8</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length $l$ (mm)	1	UL1015	18	purple	500	2, 3	UL1015	18	gray	500	4	UL1015	18	orange	500	5, 6	UL1015	18	black	500	7, 8	UL1015	18	red	500
Pin #	Wire	AWG	Color	Length $l$ (mm)																												
1	UL1015	18	purple	500																												
2, 3	UL1015	18	gray	500																												
4	UL1015	18	orange	500																												
5, 6	UL1015	18	black	500																												
7, 8	UL1015	18	red	500																												

●Model number  
**H-OU-23**

Housing : VHR-8N (J.S.T.)  
Pin : SVH-21T-P1.1 (J.S.T.)  
Weight : 80g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length $l$ (mm)
1, 2	UL1015	18	gray	500
3, 4	UL1015	18	orange	500
5, 6	UL1015	18	black	500
7, 8	UL1015	18	red	500

●Model number  
**H-OU-24**

Housing : VHR-10N (J.S.T.)  
Pin : SVH-21T-P1.1 (J.S.T.)  
Weight : 100g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length $l$ (mm)
1, 2, 3	UL1015	18	gray	500
4, 5, 6	UL1015	18	orange	500
7, 8	UL1015	18	black	500
9, 10	UL1015	18	red	500

●Model number  
**H-OU-25**

Housing : XHP-3 (J.S.T.)  
Pin : SXH-001-P0.6 (J.S.T.)  
Weight : 10g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length $l$ (mm)
1	UL1007	22	orange	500
2	UL1007	22	gray	500
3	UL1007	22	purple	500

Harness for remote ON/OFF(R type) is prepared in LDA, LEA, LEB, LEP, LFA, LFP & LMA series.

LDA Series  
 LEA Series  
 LEB Series  
 LEP Series  
 LFA Series  
 LFP Series  
 LHA Series  
 LHP Series  
 LMA Series

Mating harness

Model	Harness model #
LDA50F, LDA75F, LDA100W, LDA150W, LDA300W	H-RC-1
LEA50F, LEA75F, LEA100F, LEA150F, LEP100F, LEP150F, LEP240F	
LEB100F, LEB150F, LEB225F	
LFA100F, LFA150F, LFA240F, LFA300F, LFP100F, LFP150F, LFP240F, LFP300F	
LHA100F, LHA150F, LHA300F, LHP150F, LHP300F	
LMA100F, LMA150F, LMA240F	

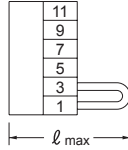
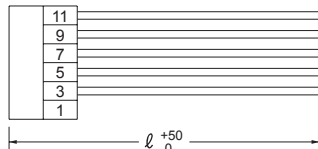
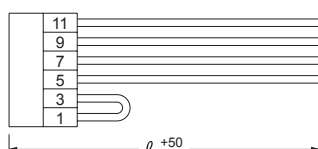
<p>●Model number</p> <p><b>H-RC-1</b></p> <p>Housing : XHP-2 (J.S.T.)                  Pin : SXH-001T-P0.6 (J.S.T.)                  Weight : 7g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length l (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1007</td> <td>22</td> <td>orange</td> <td>500</td> </tr> <tr> <td>2</td> <td>UL1007</td> <td>22</td> <td>blue</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length l (mm)	1	UL1007	22	orange	500	2	UL1007	22	blue	500
Pin #	Wire	AWG	Color	Length l (mm)													
1	UL1007	22	orange	500													
2	UL1007	22	blue	500													

Harness to use the function of the output module is prepared in MAX series.

# MAX Series

## Mating harness

Model	Harness model #	Contents
MAX1600F	H-SN-3	Harness for using no function of the output module. It is appended to standard model.
MAX1600T	H-SN-4	Harness for using all functions of output module.
MAX3200T	H-SN-6	Harness for using all functions except remote sensing of the output module.

<p>●Model number</p> <h3>H-SN-3</h3> <p>Housing : PHDR-12VS (J.S.T.) Pin : SPHD-002T-P0.5 (J.S.T.) Weight : 1g max</p>	<p>●Type</p> 	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr><td>1</td><td>UL1061</td><td>28</td><td>red</td><td>30</td></tr> <tr><td>2</td><td>UL1061</td><td>28</td><td>black</td><td>30</td></tr> <tr><td>3</td><td>UL1061</td><td>28</td><td>red</td><td>30</td></tr> <tr><td>4</td><td>UL1061</td><td>28</td><td>black</td><td>30</td></tr> <tr><td>5</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>6</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>7</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>8</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>9</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>10</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>11</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>12</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1061	28	red	30	2	UL1061	28	black	30	3	UL1061	28	red	30	4	UL1061	28	black	30	5	-	-	-	-	6	-	-	-	-	7	-	-	-	-	8	-	-	-	-	9	-	-	-	-	10	-	-	-	-	11	-	-	-	-	12	-	-	-	-
Pin #	Wire	AWG	Color	Length ℓ (mm)																																																															
1	UL1061	28	red	30																																																															
2	UL1061	28	black	30																																																															
3	UL1061	28	red	30																																																															
4	UL1061	28	black	30																																																															
5	-	-	-	-																																																															
6	-	-	-	-																																																															
7	-	-	-	-																																																															
8	-	-	-	-																																																															
9	-	-	-	-																																																															
10	-	-	-	-																																																															
11	-	-	-	-																																																															
12	-	-	-	-																																																															
<p>●Model number</p> <h3>H-SN-4</h3> <p>Housing : PHDR-12VS (J.S.T.) Pin : SPHD-002T-P0.5 (J.S.T.) Weight : 10g max</p>	<p>●Type</p> 	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr><td>1</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>2</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>3</td><td>UL1061</td><td>28</td><td>red</td><td>500</td></tr> <tr><td>4</td><td>UL1061</td><td>28</td><td>black</td><td>500</td></tr> <tr><td>5</td><td>UL1061</td><td>28</td><td>brown</td><td>500</td></tr> <tr><td>6</td><td>UL1061</td><td>28</td><td>black</td><td>500</td></tr> <tr><td>7</td><td>UL1061</td><td>28</td><td>orange</td><td>500</td></tr> <tr><td>8</td><td>UL1061</td><td>28</td><td>black</td><td>500</td></tr> <tr><td>9</td><td>UL1061</td><td>28</td><td>yellow</td><td>500</td></tr> <tr><td>10</td><td>UL1061</td><td>28</td><td>green</td><td>500</td></tr> <tr><td>11</td><td>UL1061</td><td>28</td><td>blue</td><td>500</td></tr> <tr><td>12</td><td>UL1061</td><td>28</td><td>purple</td><td>500</td></tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	-	-	-	-	2	-	-	-	-	3	UL1061	28	red	500	4	UL1061	28	black	500	5	UL1061	28	brown	500	6	UL1061	28	black	500	7	UL1061	28	orange	500	8	UL1061	28	black	500	9	UL1061	28	yellow	500	10	UL1061	28	green	500	11	UL1061	28	blue	500	12	UL1061	28	purple	500
Pin #	Wire	AWG	Color	Length ℓ (mm)																																																															
1	-	-	-	-																																																															
2	-	-	-	-																																																															
3	UL1061	28	red	500																																																															
4	UL1061	28	black	500																																																															
5	UL1061	28	brown	500																																																															
6	UL1061	28	black	500																																																															
7	UL1061	28	orange	500																																																															
8	UL1061	28	black	500																																																															
9	UL1061	28	yellow	500																																																															
10	UL1061	28	green	500																																																															
11	UL1061	28	blue	500																																																															
12	UL1061	28	purple	500																																																															
<p>●Model number</p> <h3>H-SN-6</h3> <p>Housing : PHDR-12VS (J.S.T.) Pin : SPHD-002T-P0.5 (J.S.T.) Weight : 8g max</p>	<p>●Type</p> 	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr><td>1</td><td>UL1061</td><td>28</td><td>red</td><td>30</td></tr> <tr><td>2</td><td>UL1061</td><td>28</td><td>black</td><td>30</td></tr> <tr><td>3</td><td>UL1061</td><td>28</td><td>red</td><td>30</td></tr> <tr><td>4</td><td>UL1061</td><td>28</td><td>black</td><td>30</td></tr> <tr><td>5</td><td>UL1061</td><td>28</td><td>brown</td><td>500</td></tr> <tr><td>6</td><td>UL1061</td><td>28</td><td>black</td><td>500</td></tr> <tr><td>7</td><td>UL1061</td><td>28</td><td>orange</td><td>500</td></tr> <tr><td>8</td><td>UL1061</td><td>28</td><td>black</td><td>500</td></tr> <tr><td>9</td><td>UL1061</td><td>28</td><td>yellow</td><td>500</td></tr> <tr><td>10</td><td>UL1061</td><td>28</td><td>green</td><td>500</td></tr> <tr><td>11</td><td>UL1061</td><td>28</td><td>blue</td><td>500</td></tr> <tr><td>12</td><td>UL1061</td><td>28</td><td>purple</td><td>500</td></tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1061	28	red	30	2	UL1061	28	black	30	3	UL1061	28	red	30	4	UL1061	28	black	30	5	UL1061	28	brown	500	6	UL1061	28	black	500	7	UL1061	28	orange	500	8	UL1061	28	black	500	9	UL1061	28	yellow	500	10	UL1061	28	green	500	11	UL1061	28	blue	500	12	UL1061	28	purple	500
Pin #	Wire	AWG	Color	Length ℓ (mm)																																																															
1	UL1061	28	red	30																																																															
2	UL1061	28	black	30																																																															
3	UL1061	28	red	30																																																															
4	UL1061	28	black	30																																																															
5	UL1061	28	brown	500																																																															
6	UL1061	28	black	500																																																															
7	UL1061	28	orange	500																																																															
8	UL1061	28	black	500																																																															
9	UL1061	28	yellow	500																																																															
10	UL1061	28	green	500																																																															
11	UL1061	28	blue	500																																																															
12	UL1061	28	purple	500																																																															

\* The even number pin side of the connector is the same wiring as the odd number pin side.



Harness to use the function of the output module is prepared in ACE series.

# ACE Series

## Mating harness

Model	Harness model #	Contents
ACE series	H-SN-14	Harness for using AUX and PR alarm of CN1.
	H-SN-16	Harness for using all function of output modules. (CN2)
	H-SN-17	Harness for using all functions except remote sensing of the output modules. (CN2)
	H-SN-18	Harness for using remote ON/OFF of output module S, T, U.(CN2)

●Model number  
**H-SN-14**

Housing : XHP-3 (J.S.T.)  
Pin : SXH-001T-P0.6 (J.S.T.)  
Weight : 10g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length $l$ (mm)
1	UL1007	22	black	500
2	UL1007	22	yellow	500
3	UL1007	22	red	500

---

●Model number  
**H-SN-16**

Housing : PHDR-10VS (J.S.T.)  
Pin : SPHD-002T-P0.5 (J.S.T.)  
Weight : 8g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length $l$ (mm)
1	UL1061	28	yellow	500
2	UL1061	28	orange	500
3	-	-	-	-
4	-	-	-	-
5	UL1061	28	blue	500
6	UL1061	28	black	500
7	UL1061	28	red	500
8	UL1061	28	red	500
9	UL1061	28	black	500
10	UL1061	28	black	500

\* The even number pin side of the connector is the same wiring as the odd number pin side.

---

●Model number  
**H-SN-17**

Housing : PHDR-10VS (J.S.T.)  
Pin : SPHD-002T-P0.5 (J.S.T.)  
Weight : 5g max

●Type

\* Pin #7 and #8 are shorted with harness and also pin #9 and #10.

●Wire

Pin #	Wire	AWG	Color	Length $l$ (mm)
1	UL1061	28	yellow	500
2	UL1061	28	orange	500
3	-	-	-	-
4	-	-	-	-
5	UL1061	28	blue	500
6	UL1061	28	black	500
7	UL1061	28	red	30
8	UL1061	28	red	30
9	UL1061	28	black	30
10	UL1061	28	black	30

\* The even number pin side of the connector is the same wiring as the odd number pin side.

---

●Model number  
**H-SN-18**

Housing : PHR-2 (J.S.T.)  
Pin : SPH-002T-P0.5S (J.S.T.)  
Weight : 4g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length $l$ (mm)
1	UL1007	26	yellow	500
2	UL1007	26	orange	500

Option-28

October 26, 2021

Harness to use the function of ADA Series is prepared.

\* Please see the our company home page or consult us about detailed information.

## ADA Series

### Mating harness

Model	Harness model #	Contents
ADA Series	H-SN-23	:Harness for using option:-W and/or -R when I/O interface is terminal block type (standard).
	H-IN-11	:Input harness when I/O interface is connector type (option:-J).
	H-OU-26	:Output harness when I/O interface is connector type (option:-J).
	H-PA-5	:Harness for parallel operation when I/O interface is connector type (option:-J).
	H-RC-2	:Harness for using option:-R when I/O interface is connector type (option:-J).

<p>●Model number <b>H-SN-23</b></p> <p>Housing : PHDR-14VS(J.S.T) Pin : SPHD-002T-P0.5(J.S.T) Weight : 6g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr><td>1</td><td>UL1061</td><td>28</td><td>red</td><td>500</td></tr> <tr><td>2</td><td>UL1061</td><td>28</td><td>black</td><td>500</td></tr> <tr><td>3</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>4</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>5</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>6</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>7</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>8</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>9</td><td>UL1061</td><td>28</td><td>orange</td><td>500</td></tr> <tr><td>10</td><td>UL1061</td><td>28</td><td>blue</td><td>500</td></tr> <tr><td>11</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>12</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>13</td><td>UL1061</td><td>28</td><td>yellow</td><td>500</td></tr> <tr><td>14</td><td>UL1061</td><td>28</td><td>black</td><td>500</td></tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1061	28	red	500	2	UL1061	28	black	500	3	-	-	-	-	4	-	-	-	-	5	-	-	-	-	6	-	-	-	-	7	-	-	-	-	8	-	-	-	-	9	UL1061	28	orange	500	10	UL1061	28	blue	500	11	-	-	-	-	12	-	-	-	-	13	UL1061	28	yellow	500	14	UL1061	28	black	500
Pin #	Wire	AWG	Color	Length ℓ (mm)																																																																									
1	UL1061	28	red	500																																																																									
2	UL1061	28	black	500																																																																									
3	-	-	-	-																																																																									
4	-	-	-	-																																																																									
5	-	-	-	-																																																																									
6	-	-	-	-																																																																									
7	-	-	-	-																																																																									
8	-	-	-	-																																																																									
9	UL1061	28	orange	500																																																																									
10	UL1061	28	blue	500																																																																									
11	-	-	-	-																																																																									
12	-	-	-	-																																																																									
13	UL1061	28	yellow	500																																																																									
14	UL1061	28	black	500																																																																									
<p>●Model number <b>H-IN-11</b></p> <p>Housing : 1-178129-6(AMP) Pin : 1-175218-5 equivalent goods(AMP) Weight : 45g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr><td>B 1</td><td>UL1051</td><td>18</td><td>white</td><td>500</td></tr> <tr><td>A 1</td><td>UL1051</td><td>18</td><td>white</td><td>500</td></tr> <tr><td>B 2</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>A 2</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>B 3</td><td>UL1051</td><td>18</td><td>black</td><td>500</td></tr> <tr><td>A 3</td><td>UL1051</td><td>18</td><td>black</td><td>500</td></tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	B 1	UL1051	18	white	500	A 1	UL1051	18	white	500	B 2	-	-	-	-	A 2	-	-	-	-	B 3	UL1051	18	black	500	A 3	UL1051	18	black	500																																								
Pin #	Wire	AWG	Color	Length ℓ (mm)																																																																									
B 1	UL1051	18	white	500																																																																									
A 1	UL1051	18	white	500																																																																									
B 2	-	-	-	-																																																																									
A 2	-	-	-	-																																																																									
B 3	UL1051	18	black	500																																																																									
A 3	UL1051	18	black	500																																																																									
<p>●Model number <b>H-OU-26</b></p> <p>Housing : 178289-5(AMP) Pin : 1-353717-5 equivalent goods(AMP) Weight : 105g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr><td>B 1</td><td>UL1007</td><td>16</td><td>red</td><td>500</td></tr> <tr><td>A 1</td><td>UL1007</td><td>16</td><td>red</td><td>500</td></tr> <tr><td>B 2</td><td>UL1007</td><td>16</td><td>red</td><td>500</td></tr> <tr><td>A 2</td><td>UL1007</td><td>16</td><td>red</td><td>500</td></tr> <tr><td>B 3</td><td>UL1007</td><td>16</td><td>red</td><td>500</td></tr> <tr><td>A 3</td><td>UL1007</td><td>16</td><td>black</td><td>500</td></tr> <tr><td>B 4</td><td>UL1007</td><td>16</td><td>black</td><td>500</td></tr> <tr><td>A 4</td><td>UL1007</td><td>16</td><td>black</td><td>500</td></tr> <tr><td>B 5</td><td>UL1007</td><td>16</td><td>black</td><td>500</td></tr> <tr><td>A 5</td><td>UL1007</td><td>16</td><td>black</td><td>500</td></tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	B 1	UL1007	16	red	500	A 1	UL1007	16	red	500	B 2	UL1007	16	red	500	A 2	UL1007	16	red	500	B 3	UL1007	16	red	500	A 3	UL1007	16	black	500	B 4	UL1007	16	black	500	A 4	UL1007	16	black	500	B 5	UL1007	16	black	500	A 5	UL1007	16	black	500																				
Pin #	Wire	AWG	Color	Length ℓ (mm)																																																																									
B 1	UL1007	16	red	500																																																																									
A 1	UL1007	16	red	500																																																																									
B 2	UL1007	16	red	500																																																																									
A 2	UL1007	16	red	500																																																																									
B 3	UL1007	16	red	500																																																																									
A 3	UL1007	16	black	500																																																																									
B 4	UL1007	16	black	500																																																																									
A 4	UL1007	16	black	500																																																																									
B 5	UL1007	16	black	500																																																																									
A 5	UL1007	16	black	500																																																																									
<p>●Model number <b>H-PA-5</b></p> <p>Housing : 171822-2(AMP) Pin : 170204-2 equivalent goods(AMP) Weight : 4g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr><td>1</td><td>UL1007</td><td>22</td><td>white</td><td>200</td></tr> <tr><td>2</td><td>UL1007</td><td>22</td><td>black</td><td>200</td></tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1007	22	white	200	2	UL1007	22	black	200																																																												
Pin #	Wire	AWG	Color	Length ℓ (mm)																																																																									
1	UL1007	22	white	200																																																																									
2	UL1007	22	black	200																																																																									
<p>●Model number <b>H-RC-2</b></p> <p>Housing : 171822-3(AMP) Pin : 170204-2 equivalent goods(AMP) Weight : 7g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr><td>1</td><td>UL1007</td><td>22</td><td>white</td><td>500</td></tr> <tr><td>2</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>3</td><td>UL1007</td><td>22</td><td>red</td><td>500</td></tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1007	22	white	500	2	-	-	-	-	3	UL1007	22	red	500																																																							
Pin #	Wire	AWG	Color	Length ℓ (mm)																																																																									
1	UL1007	22	white	500																																																																									
2	-	-	-	-																																																																									
3	UL1007	22	red	500																																																																									

Harness to use the function is prepared in PB series.

## PB Series

### Mating harness

Model	Harness model #	Contents
PBA10F, PBA15F, PBW15F, PBA30F, PBW30F, PBA50F, PBW50F, PBA75F, PBA100F, PBA150F ★1	H-IN-3 or H-IN-27	Input harness when I/O interface is connector (Mfr: J.S.T.) type (option : -J1)
PBA10F, PBA15F, PBA30F, PBA50F	H-OU-9	Output harness when I/O interface is connector (Mfr: J.S.T.) type (option : -J1)
PBA75F, PBA100F, PBA150F ★1	H-OU-18	Output harness when I/O interface is connector (Mfr: J.S.T.) type (option : -J1)
PBW15F, PBW30F, PBW50F	H-OU-48	Output harness when I/O interface is connector (Mfr: J.S.T.) type (option : -J1)
PBA50F, PBW50F, PBA75F, PBA100F, PBA150F	H-RC-1	Harness for using option : -R
PBA100F, PBA150F ★2	H-SN-1	Harness for using option : -K
PBA10F, PBA15F, PBW15F, PBA30F, PBW30F, PBA50F, PBW50F, PBA75F, PBA100F, PBA150F	H-SN-18	Harness for using option : -V
PBA300F	H-PA-3	Harness for parallel operation
PBA600F	H-SN-20	Harness for using all functions of CN1 and CN2
PBA1000F	H-SN-21	Harness for using all functions except remote sensing of CN2
PBA1500F	H-SN-22	Harness for using all functions of CN3
PBA1500T	H-SN-24	Harness for using example remote ON/OFF circuit (C)

★1 Available for 12V, 15V, 24V, 36V and 48V output model in PBA100F / 150F.

★2 Available for 3.3V and 5V output model in PBA100F / 150F.

<p>●Model number <b>H-IN-3</b> Housing : VHR-5N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 20g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL 1015</td> <td>20</td> <td>white</td> <td>500</td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>UL 1015</td> <td>20</td> <td>black</td> <td>500</td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>UL 1015</td> <td>20</td> <td>green</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL 1015	20	white	500	2					3	UL 1015	20	black	500	4					5	UL 1015	20	green	500
Pin #	Wire	AWG	Color	Length ℓ (mm)																												
1	UL 1015	20	white	500																												
2																																
3	UL 1015	20	black	500																												
4																																
5	UL 1015	20	green	500																												
<p>●Model number <b>H-IN-27</b> Housing : VHR-5N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 20g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL 1015</td> <td>20</td> <td>white</td> <td>500</td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>UL 1015</td> <td>20</td> <td>black</td> <td>500</td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>UL 1015</td> <td>20</td> <td>green/yellow</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL 1015	20	white	500	2					3	UL 1015	20	black	500	4					5	UL 1015	20	green/yellow	500
Pin #	Wire	AWG	Color	Length ℓ (mm)																												
1	UL 1015	20	white	500																												
2																																
3	UL 1015	20	black	500																												
4																																
5	UL 1015	20	green/yellow	500																												
<p>●Model number <b>H-OU-9</b> Housing : VHR-4N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 40g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL 1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>2</td> <td>UL 1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>3</td> <td>UL 1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> <tr> <td>4</td> <td>UL 1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL 1015	18	black	500	2	UL 1015	18	black	500	3	UL 1015	18	red	500	4	UL 1015	18	red	500					
Pin #	Wire	AWG	Color	Length ℓ (mm)																												
1	UL 1015	18	black	500																												
2	UL 1015	18	black	500																												
3	UL 1015	18	red	500																												
4	UL 1015	18	red	500																												
<p>●Model number <b>H-OU-18</b> Housing : VHR-6N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 60g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1 - 3</td> <td>UL 1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>4 - 6</td> <td>UL 1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1 - 3	UL 1015	18	black	500	4 - 6	UL 1015	18	red	500															
Pin #	Wire	AWG	Color	Length ℓ (mm)																												
1 - 3	UL 1015	18	black	500																												
4 - 6	UL 1015	18	red	500																												
<p>●Model number <b>H-OU-48</b> Housing : VHR-4N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 40g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL 1015</td> <td>18</td> <td>purple</td> <td>500</td> </tr> <tr> <td>2</td> <td>UL 1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>3</td> <td>UL 1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>4</td> <td>UL 1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL 1015	18	purple	500	2	UL 1015	18	black	500	3	UL 1015	18	black	500	4	UL 1015	18	red	500					
Pin #	Wire	AWG	Color	Length ℓ (mm)																												
1	UL 1015	18	purple	500																												
2	UL 1015	18	black	500																												
3	UL 1015	18	black	500																												
4	UL 1015	18	red	500																												

<p>●Model number <b>H-RC-1</b></p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1007</td> <td>22</td> <td>orange</td> <td>500</td> </tr> <tr> <td>2</td> <td>UL1007</td> <td>22</td> <td>blue</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1007	22	orange	500	2	UL1007	22	blue	500																																								
Pin #	Wire	AWG	Color	Length ℓ (mm)																																																					
1	UL1007	22	orange	500																																																					
2	UL1007	22	blue	500																																																					
<p>●Model number <b>H-SN-1</b></p> <p>Housing : XHP-2 (J.S.T.) Pin : SXH-001T-P0.6 (J.S.T.) Weight : 7g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>UL1061</td> <td>28</td> <td>black</td> <td>500</td> </tr> <tr> <td>3</td> <td>UL1061</td> <td>28</td> <td>red</td> <td>500</td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1					2	UL1061	28	black	500	3	UL1061	28	red	500	4																																		
Pin #	Wire	AWG	Color	Length ℓ (mm)																																																					
1																																																									
2	UL1061	28	black	500																																																					
3	UL1061	28	red	500																																																					
4																																																									
<p>●Model number <b>H-SN-18</b></p> <p>Housing : PHR-2 (J.S.T.) Pin : SPH-002T-P0.5S (J.S.T.) Weight : 4g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1007</td> <td>26</td> <td>yellow</td> <td>500</td> </tr> <tr> <td>2</td> <td>UL1007</td> <td>26</td> <td>orange</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1007	26	yellow	500	2	UL1007	26	orange	500																																								
Pin #	Wire	AWG	Color	Length ℓ (mm)																																																					
1	UL1007	26	yellow	500																																																					
2	UL1007	26	orange	500																																																					
<p>●Model number <b>H-PA-3</b></p> <p>Housing : PHDR-10VS(J.S.T) Pin : SPHD-002T-P0.5(J.S.T) Weight : 5g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>2</td> <td>UL1061</td> <td>28</td> <td>red</td> <td>270</td> </tr> <tr> <td>3</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>4</td> <td>UL1061</td> <td>28</td> <td>black</td> <td>270</td> </tr> <tr> <td>5</td> <td>UL1061</td> <td>28</td> <td>yellow</td> <td>270</td> </tr> <tr> <td>6</td> <td>UL1061</td> <td>28</td> <td>green</td> <td>270</td> </tr> <tr> <td>7</td> <td>UL1061</td> <td>28</td> <td>blue</td> <td>270</td> </tr> <tr> <td>8</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>9</td> <td>UL1061</td> <td>28</td> <td>orange</td> <td>270</td> </tr> <tr> <td>10</td> <td>UL1061</td> <td>28</td> <td>purple</td> <td>270</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	-	-	-	-	2	UL1061	28	red	270	3	-	-	-	-	4	UL1061	28	black	270	5	UL1061	28	yellow	270	6	UL1061	28	green	270	7	UL1061	28	blue	270	8	-	-	-	-	9	UL1061	28	orange	270	10	UL1061	28	purple	270
Pin #	Wire	AWG	Color	Length ℓ (mm)																																																					
1	-	-	-	-																																																					
2	UL1061	28	red	270																																																					
3	-	-	-	-																																																					
4	UL1061	28	black	270																																																					
5	UL1061	28	yellow	270																																																					
6	UL1061	28	green	270																																																					
7	UL1061	28	blue	270																																																					
8	-	-	-	-																																																					
9	UL1061	28	orange	270																																																					
10	UL1061	28	purple	270																																																					
<p>●Model number <b>H-SN-20</b></p> <p>Housing : PHDR-10VS(J.S.T) Pin : SPHD-002T-P0.5(J.S.T) Weight : 8g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>2</td> <td>UL1061</td> <td>28</td> <td>red</td> <td>500</td> </tr> <tr> <td>3</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>4</td> <td>UL1061</td> <td>28</td> <td>black</td> <td>500</td> </tr> <tr> <td>5</td> <td>UL1061</td> <td>28</td> <td>yellow</td> <td>500</td> </tr> <tr> <td>6</td> <td>UL1061</td> <td>28</td> <td>green</td> <td>500</td> </tr> <tr> <td>7</td> <td>UL1061</td> <td>28</td> <td>blue</td> <td>500</td> </tr> <tr> <td>8</td> <td>UL1061</td> <td>28</td> <td>black</td> <td>500</td> </tr> <tr> <td>9</td> <td>UL1061</td> <td>28</td> <td>orange</td> <td>500</td> </tr> <tr> <td>10</td> <td>UL1061</td> <td>28</td> <td>purple</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	-	-	-	-	2	UL1061	28	red	500	3	-	-	-	-	4	UL1061	28	black	500	5	UL1061	28	yellow	500	6	UL1061	28	green	500	7	UL1061	28	blue	500	8	UL1061	28	black	500	9	UL1061	28	orange	500	10	UL1061	28	purple	500
Pin #	Wire	AWG	Color	Length ℓ (mm)																																																					
1	-	-	-	-																																																					
2	UL1061	28	red	500																																																					
3	-	-	-	-																																																					
4	UL1061	28	black	500																																																					
5	UL1061	28	yellow	500																																																					
6	UL1061	28	green	500																																																					
7	UL1061	28	blue	500																																																					
8	UL1061	28	black	500																																																					
9	UL1061	28	orange	500																																																					
10	UL1061	28	purple	500																																																					

●Model number  
**H-SN-21**

Housing : PHDR-10VS(J.S.T)  
Pin : SPHD-002T-P0.5(J.S.T)  
Weight : 6g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length $\ell$ (mm)
1	-	-	-	-
2	-	-	-	-
3	-	-	-	-
4	-	-	-	-
5	UL1061	28	yellow	500
6	UL1061	28	green	500
7	UL1061	28	blue	500
8	UL1061	28	black	500
9	UL1061	28	orange	500
10	UL1061	28	purple	500

●Model number  
**H-SN-22**

Housing : PHDR-8VS(J.S.T)  
Pin : SPHD-002T-P0.5(J.S.T)  
Weight : 5g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length $\ell$ (mm)
1	-	-	-	-
2	-	-	-	-
3	UL1061	28	pink	500
4	UL1061	28	brown	500
5	UL1061	28	white	500
6	-	-	-	-
7	UL1061	28	yellow	500
8	UL1061	28	gray	500

●Model number  
**H-SN-24**

CN A :  
Housing : PHDR-10VS(J.S.T)  
Pin : SPHD-002T-P0.5(J.S.T)

CN B :  
Housing : PHDR-08VS(J.S.T)  
Pin : SPHD-002T-P0.5(J.S.T)

Weight : 2g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length $\ell$ (mm)	
CN A	1	UL1061	28	red	30
	2	UL1061	28	red	30
	3	UL1061	28	black	30
	4	UL1061	28	black	30
	5	-	-	-	-
	6	-	-	-	-
	7	-	-	-	-
	8	-	-	-	-
	9	UL1061	28	black	70
	10	UL1061	28	black	70
CN B	1	-	-	-	
	2	-	-	-	
	3	-	-	-	
	4	UL1061	28	black	70
	5	UL1061	28	black	70
	6	-	-	-	-
	7	-	-	-	-
	8	-	-	-	-

\* Pin #1 and #2, Pin #3 and #4 in CN A are connected by harness.  
\* Pin #9 in CN A and Pin #4 in CN B are connected by harness.  
\* Pin #10 in CN A and Pin #5 in CN B are connected by harness.

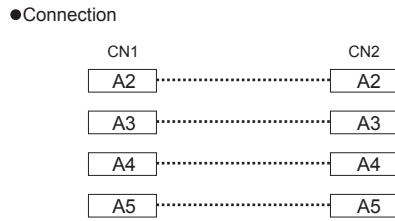
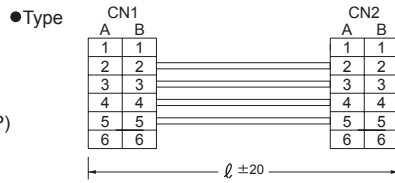
## Mating harness

Model	Harness model #	Contents	Connector	
			SCHA	SCDA
SC Series	H-SN-27	Harness for using remote signal ON/OFF function	CN1~CN4	CN1,CN2
	H-SN-28	Harness for using MAS,SLV,CTB,PCONT,COM terminal	CN5,CN6	CN3,CN4
	H-SN-29	Harness for using system ON/OFF function	CN7,CN8	CN5,CN6
	H-SN-30	Harness for using alarm / output voltage monitor terminal	CN9,CN10	CN7,CN8
	H-OU-35	Output harness	Output connector 1~20	Output connector 1~14
	H-PA-7	Harness for using parallel connection (SLAVE unit-SLAVE unit)	CN5,CN6	CN3,CN4
	H-PA-8	Harness for using parallel connection (MASTER unit-SLAVE unit)	CN5,CN6	CN3,CN4

<p>●Model number <b>H-SN-27</b></p> <p>Housing : 1-1318119-4 (Tyco Electronics AMP) Pin : 1318105-1 or 1318107-1 (Tyco Electronics AMP) Weight : 100g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length <math>l</math> (mm)</th> </tr> </thead> <tbody> <tr><td>A 1</td><td>UL1007</td><td>22</td><td>brown</td><td>2000</td></tr> <tr><td>B 1</td><td>UL1007</td><td>22</td><td>green</td><td>2000</td></tr> <tr><td>A 2</td><td>UL1007</td><td>22</td><td>red</td><td>2000</td></tr> <tr><td>B 2</td><td>UL1007</td><td>22</td><td>blue</td><td>2000</td></tr> <tr><td>A 3</td><td>UL1007</td><td>22</td><td>orange</td><td>2000</td></tr> <tr><td>B 3</td><td>UL1007</td><td>22</td><td>purple</td><td>2000</td></tr> <tr><td>A 4</td><td>UL1007</td><td>22</td><td>yellow</td><td>2000</td></tr> <tr><td>B 4</td><td>UL1007</td><td>22</td><td>gray</td><td>2000</td></tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length $l$ (mm)	A 1	UL1007	22	brown	2000	B 1	UL1007	22	green	2000	A 2	UL1007	22	red	2000	B 2	UL1007	22	blue	2000	A 3	UL1007	22	orange	2000	B 3	UL1007	22	purple	2000	A 4	UL1007	22	yellow	2000	B 4	UL1007	22	gray	2000																				
Pin #	Wire	AWG	Color	Length $l$ (mm)																																																															
A 1	UL1007	22	brown	2000																																																															
B 1	UL1007	22	green	2000																																																															
A 2	UL1007	22	red	2000																																																															
B 2	UL1007	22	blue	2000																																																															
A 3	UL1007	22	orange	2000																																																															
B 3	UL1007	22	purple	2000																																																															
A 4	UL1007	22	yellow	2000																																																															
B 4	UL1007	22	gray	2000																																																															
<p>●Model number <b>H-SN-28</b></p> <p>Housing : 1-1318118-6 (Tyco Electronics AMP) Pin : 1318105-1 or 1318107-1 (Tyco Electronics AMP) Weight : 65g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length <math>l</math> (mm)</th> </tr> </thead> <tbody> <tr><td>A 1</td><td>UL1007</td><td>22</td><td>brown</td><td>2000</td></tr> <tr><td>B 1</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>A 2</td><td>UL1007</td><td>22</td><td>red</td><td>2000</td></tr> <tr><td>B 2</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>A 3</td><td>UL1007</td><td>22</td><td>orange</td><td>2000</td></tr> <tr><td>B 3</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>A 4</td><td>UL1007</td><td>22</td><td>yellow</td><td>2000</td></tr> <tr><td>B 4</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>A 5</td><td>UL1007</td><td>22</td><td>green</td><td>2000</td></tr> <tr><td>B 5</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>A 6</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>B 6</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length $l$ (mm)	A 1	UL1007	22	brown	2000	B 1	-	-	-	-	A 2	UL1007	22	red	2000	B 2	-	-	-	-	A 3	UL1007	22	orange	2000	B 3	-	-	-	-	A 4	UL1007	22	yellow	2000	B 4	-	-	-	-	A 5	UL1007	22	green	2000	B 5	-	-	-	-	A 6	-	-	-	-	B 6	-	-	-	-
Pin #	Wire	AWG	Color	Length $l$ (mm)																																																															
A 1	UL1007	22	brown	2000																																																															
B 1	-	-	-	-																																																															
A 2	UL1007	22	red	2000																																																															
B 2	-	-	-	-																																																															
A 3	UL1007	22	orange	2000																																																															
B 3	-	-	-	-																																																															
A 4	UL1007	22	yellow	2000																																																															
B 4	-	-	-	-																																																															
A 5	UL1007	22	green	2000																																																															
B 5	-	-	-	-																																																															
A 6	-	-	-	-																																																															
B 6	-	-	-	-																																																															
<p>●Model number <b>H-SN-29</b></p> <p>Housing : 1-1318119-3 (Tyco Electronics AMP) Pin : 1318105-1 or 1318107-1 (Tyco Electronics AMP) Weight : 25g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length <math>l</math> (mm)</th> </tr> </thead> <tbody> <tr><td>A 1</td><td>UL1007</td><td>22</td><td>brown</td><td>2000</td></tr> <tr><td>B 1</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>A 2</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>B 2</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>A 3</td><td>UL1007</td><td>22</td><td>orange</td><td>2000</td></tr> <tr><td>B 3</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length $l$ (mm)	A 1	UL1007	22	brown	2000	B 1	-	-	-	-	A 2	-	-	-	-	B 2	-	-	-	-	A 3	UL1007	22	orange	2000	B 3	-	-	-	-																														
Pin #	Wire	AWG	Color	Length $l$ (mm)																																																															
A 1	UL1007	22	brown	2000																																																															
B 1	-	-	-	-																																																															
A 2	-	-	-	-																																																															
B 2	-	-	-	-																																																															
A 3	UL1007	22	orange	2000																																																															
B 3	-	-	-	-																																																															
<p>●Model number <b>H-SN-30</b></p> <p>Housing : 2-1318119-3 (Tyco Electronics AMP) Pin : 1318105-1 or 1318107-1 (Tyco Electronics AMP) Weight : 50g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length <math>l</math> (mm)</th> </tr> </thead> <tbody> <tr><td>A 1</td><td>UL1007</td><td>22</td><td>brown</td><td>2000</td></tr> <tr><td>B 1</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>A 2</td><td>UL1007</td><td>22</td><td>red</td><td>2000</td></tr> <tr><td>B 2</td><td>UL1007</td><td>22</td><td>green</td><td>2000</td></tr> <tr><td>A 3</td><td>UL1007</td><td>22</td><td>orange</td><td>2000</td></tr> <tr><td>B 3</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length $l$ (mm)	A 1	UL1007	22	brown	2000	B 1	-	-	-	-	A 2	UL1007	22	red	2000	B 2	UL1007	22	green	2000	A 3	UL1007	22	orange	2000	B 3	-	-	-	-																														
Pin #	Wire	AWG	Color	Length $l$ (mm)																																																															
A 1	UL1007	22	brown	2000																																																															
B 1	-	-	-	-																																																															
A 2	UL1007	22	red	2000																																																															
B 2	UL1007	22	green	2000																																																															
A 3	UL1007	22	orange	2000																																																															
B 3	-	-	-	-																																																															
<p>●Model number <b>H-OU-35</b></p> <p>Housing : 1-179958-2 (Tyco Electronics AMP) Pin : 179956-2 or 316041-2 (Tyco Electronics AMP) Weight : 6g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length <math>l</math> (mm)</th> </tr> </thead> <tbody> <tr><td>1</td><td>UL1015</td><td>10</td><td>red</td><td>2000</td></tr> <tr><td>2</td><td>UL1015</td><td>10</td><td>black</td><td>2000</td></tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length $l$ (mm)	1	UL1015	10	red	2000	2	UL1015	10	black	2000																																																		
Pin #	Wire	AWG	Color	Length $l$ (mm)																																																															
1	UL1015	10	red	2000																																																															
2	UL1015	10	black	2000																																																															

●Model number  
**H-PA-7**

Housing : 1-1318118-6 (Tyco Electronics AMP)  
Pin : 1318105-1 or 1318107-1  
(Tyco Electronics AMP)  
Weight : 20g max

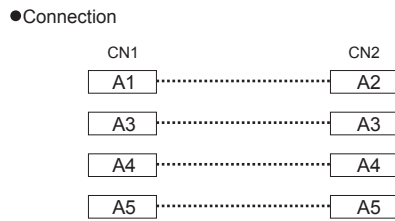
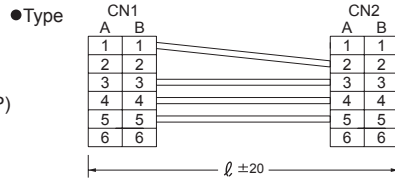


●Wire

Pin #		Wire	AWG	Color	Length $\ell$ (mm)
CN1	A 1	-	-	-	-
	B 1	-	-	-	-
	A 2	UL1007	22	red	400
	B 2	-	-	-	-
	A 3	UL1007	22	orange	400
	B 3	-	-	-	-
	A 4	UL1007	22	yellow	400
	B 4	-	-	-	-
	A 5	UL1007	22	green	400
	B 5	-	-	-	-
	A 6	-	-	-	-
	B 6	-	-	-	-
CN2	A 1	-	-	-	-
	B 1	-	-	-	-
	A 2	UL1007	22	red	400
	B 2	-	-	-	-
	A 3	UL1007	22	orange	400
	B 3	-	-	-	-
	A 4	UL1007	22	yellow	400
	B 4	-	-	-	-
	A 5	UL1007	22	green	400
	B 5	-	-	-	-
	A 6	-	-	-	-
	B 6	-	-	-	-

●Model number  
**H-PA-8**

Housing : 1-1318118-6 (Tyco Electronics AMP)  
Pin : 1318105-1 or 1318107-1  
(Tyco Electronics AMP)  
Weight : 20g max



●Wire

Pin #		Wire	AWG	Color	Length $\ell$ (mm)
CN1	A 1	UL1007	22	brown	400
	B 1	-	-	-	-
	A 2	-	-	-	-
	B 2	-	-	-	-
	A 3	UL1007	22	orange	400
	B 3	-	-	-	-
	A 4	UL1007	22	yellow	400
	B 4	-	-	-	-
	A 5	UL1007	22	green	400
	B 5	-	-	-	-
	A 6	-	-	-	-
	B 6	-	-	-	-
CN2	A 1	-	-	-	-
	B 1	-	-	-	-
	A 2	UL1007	22	brown	400
	B 2	-	-	-	-
	A 3	UL1007	22	orange	400
	B 3	-	-	-	-
	A 4	UL1007	22	yellow	400
	B 4	-	-	-	-
	A 5	UL1007	22	green	400
	B 5	-	-	-	-
	A 6	-	-	-	-
	B 6	-	-	-	-

# PMA Series

## Mating harness

Model	Harness model #	Contents
PMA15F, PMA30F, PMA60F, PMA100F	H-IN -15	Input harness when I/O interface is connector (Mfr:Tyco Electronics AMP) type
PMA15F, PMA30F	H-OU-28	Output harness when I/O interface is connector (Mfr:Tyco Electronics AMP) type
PMA60F	H-OU-29	Output harness when I/O interface is connector (Mfr:Tyco Electronics AMP) type
PMA100F	H-OU-30	Output harness when I/O interface is connector (Mfr:Tyco Electronics AMP) type
PMA15F, PMA30F, PMA60F, PMA100F	H-IN - 3	Input harness when I/O interface is connector (Mfr:J.S.T ) type (option:-J)
PMA15F, PMA30F	H-OU- 9	Output harness when I/O interface is connector (Mfr:J.S.T ) type (option:-J)
PMA60F	H-OU-18	Output harness when I/O interface is connector (Mfr:J.S.T ) type (option:-J)
PMA100F	H-OU-10	Output harness when I/O interface is connector (Mfr:J.S.T ) type (option:-J)
PMA60F, PMA100F	H-RC- 1	Harness for using option : -R

<p>●Model number <b>H-IN-3</b> Housing : VHR-5N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 20g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1015</td> <td>20</td> <td>white</td> <td>500</td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>UL1015</td> <td>20</td> <td>black</td> <td>500</td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>UL1015</td> <td>20</td> <td>green</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1015	20	white	500	2					3	UL1015	20	black	500	4					5	UL1015	20	green	500
Pin #	Wire	AWG	Color	Length ℓ (mm)																												
1	UL1015	20	white	500																												
2																																
3	UL1015	20	black	500																												
4																																
5	UL1015	20	green	500																												
<p>●Model number <b>H-IN-15</b> Housing : 1-1123722-5 (Tyco Electronics AMP) Pin : 1123721-1 or 1318912-1 (Tyco Electronics AMP) Weight : 20g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1015</td> <td>20</td> <td>white</td> <td>500</td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>UL1015</td> <td>20</td> <td>black</td> <td>500</td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>UL1015</td> <td>20</td> <td>green</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1015	20	white	500	2					3	UL1015	20	black	500	4					5	UL1015	20	green	500
Pin #	Wire	AWG	Color	Length ℓ (mm)																												
1	UL1015	20	white	500																												
2																																
3	UL1015	20	black	500																												
4																																
5	UL1015	20	green	500																												
<p>●Model number <b>H-OU-9</b> Housing : VHR-4N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 40g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>2</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>3</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> <tr> <td>4</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1015	18	black	500	2	UL1015	18	black	500	3	UL1015	18	red	500	4	UL1015	18	red	500					
Pin #	Wire	AWG	Color	Length ℓ (mm)																												
1	UL1015	18	black	500																												
2	UL1015	18	black	500																												
3	UL1015	18	red	500																												
4	UL1015	18	red	500																												
<p>●Model number <b>H-OU-10</b> Housing : VHR-8N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 80g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1 - 4</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>5 - 8</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1 - 4	UL1015	18	black	500	5 - 8	UL1015	18	red	500															
Pin #	Wire	AWG	Color	Length ℓ (mm)																												
1 - 4	UL1015	18	black	500																												
5 - 8	UL1015	18	red	500																												
<p>●Model number <b>H-OU-18</b> Housing : VHR-6N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 60g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1 - 3</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>4 - 6</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1 - 3	UL1015	18	black	500	4 - 6	UL1015	18	red	500															
Pin #	Wire	AWG	Color	Length ℓ (mm)																												
1 - 3	UL1015	18	black	500																												
4 - 6	UL1015	18	red	500																												
<p>●Model number <b>H-OU-28</b> Housing : 1-1123722-4 (Tyco Electronics AMP) Pin : 1123721-1 or 1318912-1 (Tyco Electronics AMP) Weight : 40g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>2</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>3</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> <tr> <td>4</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1015	18	black	500	2	UL1015	18	black	500	3	UL1015	18	red	500	4	UL1015	18	red	500					
Pin #	Wire	AWG	Color	Length ℓ (mm)																												
1	UL1015	18	black	500																												
2	UL1015	18	black	500																												
3	UL1015	18	red	500																												
4	UL1015	18	red	500																												
<p>●Model number <b>H-OU-29</b> Housing : 1-1123722-6 (Tyco Electronics AMP) Pin : 1123721-1 or 1318912-1 (Tyco Electronics AMP) Weight : 60g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1 - 3</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>4 - 6</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1 - 3	UL1015	18	black	500	4 - 6	UL1015	18	red	500															
Pin #	Wire	AWG	Color	Length ℓ (mm)																												
1 - 3	UL1015	18	black	500																												
4 - 6	UL1015	18	red	500																												



●Model number

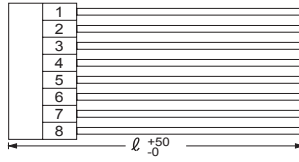
# H-OU-30

Housing : 1-1123722-8 (Tyco Electronics AMP)

Pin : 1123721-1 or  
1318912-1 (Tyco Electronics AMP)

Weight : 75g max

●Type



●Wire

Pin #	Wire	AWG	Color	Length <i>l</i> (mm)
1 - 4	UL1015	18	black	500
5 - 8	UL1015	18	red	500

●Model number

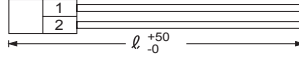
# H-RC-1

Housing : XHP-2 (J.S.T.)

Pin : SXH-001T-P0.6 (J.S.T.)

Weight : 7g max

●Type



●Wire

Pin #	Wire	AWG	Color	Length <i>l</i> (mm)
1	UL1007	22	orange	500
2	UL1007	22	blue	500

Harness to use the function is prepared in PLA series, PJA series.

The latest information is in our website

### Mating harness

Model	Harness model #	Contents
PLA15F, PLA30F, PLA50F, PJA100F, PJA150F	H-IN-22	Input harness when I/O interface is connector type (option : -J)
PJA100F, PJA150F	H-OU-37	Output harness when I/O interface is connector type (option : -J)
PLA15F, PLA30F, PLA50F	H-OU-38	Output harness when I/O interface is connector type (option : -J)
PJA100F, PJA150F	H-IN-26	Input harness when I/O interface is connector type (option : -J1)
PJA100F, PJA150F	H-OU-44	Output harness when I/O interface is connector type (option : -J1)
PJA100F, PJA150F	H-RC-1	Harness for using option : -R
PJA300F	H-RC-6	Harness for using option : -R
PJA600F, PJA1000F, PJA1500F	H-PA-9	Harness for parallel operation (option: -W)
	H-SN-32	Harness for using all functions of option -W and -R
	H-SN-33	Harness for using all functions except remote sensing of option -W and -R
	H-RC-5	Harness for using a function of option -R
PJA300F, PJA600F, PJA1000F, PJA1500F	H-SN-18	Harness for using option : -V

\* These harnesses are used for product which includes option.

<p>●Model number <b>H-IN-22</b></p> <p>Housing : 1-1123722-5 (Tyco Electronics AMP) Pin : 1123721-1 or 1318912-1 (Tyco Electronics AMP) Weight : 30g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1015</td> <td>18</td> <td>green</td> <td>500</td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>UL1015</td> <td>18</td> <td>white</td> <td>500</td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1015	18	green	500	2					3	UL1015	18	white	500	4					5	UL1015	18	black	500
Pin #	Wire	AWG	Color	Length ℓ (mm)																												
1	UL1015	18	green	500																												
2																																
3	UL1015	18	white	500																												
4																																
5	UL1015	18	black	500																												
<p>●Model number <b>H-OU-37</b></p> <p>Housing : 1-1123722-6 (Tyco Electronics AMP) Pin : 1123721-1 or 1318912-1 (Tyco Electronics AMP) Weight : 60g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1 - 3</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> <tr> <td>4 - 6</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1 - 3	UL1015	18	red	500	4 - 6	UL1015	18	black	500															
Pin #	Wire	AWG	Color	Length ℓ (mm)																												
1 - 3	UL1015	18	red	500																												
4 - 6	UL1015	18	black	500																												
<p>●Model number <b>H-OU-38</b></p> <p>Housing : 1-1123722-4 (Tyco Electronics AMP) Pin : 1123721-1 or 1318912-1 (Tyco Electronics AMP) Weight : 40g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1, 2</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> <tr> <td>3, 4</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1, 2	UL1015	18	red	500	3, 4	UL1015	18	black	500															
Pin #	Wire	AWG	Color	Length ℓ (mm)																												
1, 2	UL1015	18	red	500																												
3, 4	UL1015	18	black	500																												
<p>●Model number <b>H-IN-26</b></p> <p>Housing : VHR-5N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 30g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1015</td> <td>18</td> <td>green</td> <td>500</td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>UL1015</td> <td>18</td> <td>white</td> <td>500</td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1015	18	green	500	2					3	UL1015	18	white	500	4					5	UL1015	18	black	500
Pin #	Wire	AWG	Color	Length ℓ (mm)																												
1	UL1015	18	green	500																												
2																																
3	UL1015	18	white	500																												
4																																
5	UL1015	18	black	500																												
<p>●Model number <b>H-OU-44</b></p> <p>Housing:VHR-6N(J.S.T.) Pin:SVH-21T-P1.1(J.S.T.) Weight :60g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1 - 3</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> <tr> <td>4 - 6</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1 - 3	UL1015	18	red	500	4 - 6	UL1015	18	black	500															
Pin #	Wire	AWG	Color	Length ℓ (mm)																												
1 - 3	UL1015	18	red	500																												
4 - 6	UL1015	18	black	500																												

●Model number  
**H-RC-1**

Housing : XHP-2 (J.S.T.)  
Pin : SXH-001T-P0.6 (J.S.T.)  
Weight : 7g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length $l$ (mm)
1	UL1007	22	orange	500
2	UL1007	22	blue	500

●Model number  
**H-RC-6**

Housing : XAP-02V-1 (J.S.T.)  
Pin : SXA-001T-P0.6(J.S.T.)  
Weight : 7g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length $l$ (mm)
1	UL1007	22	orange	500
2	UL1007	22	blue	500

●Model number  
**H-PA-9**

Housing : PHDR-10VS(J.S.T.)  
Pin : SPHD-002T-P0.5(J.S.T.)  
Weight : 4g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length $l$ (mm)
1	-	-	-	-
2	UL1061	28	red	270
3	UL1061	28	orange	270
4	UL1061	28	purple	270
5	-	-	-	-
6	-	-	-	-
7	UL1061	28	green	270
8	-	-	-	-
9	-	-	-	-
10	UL1061	28	black	270

●Model number  
**H-SN-32**

Housing : PHDR-10VS(J.S.T.)  
Pin : SPHD-002T-P0.5(J.S.T.)  
Weight : 7g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length $l$ (mm)
1	-	-	-	-
2	UL1061	28	red	500
3	UL1061	28	orange	500
4	UL1061	28	purple	500
5	UL1061	28	yellow	500
6	UL1061	28	blue	500
7	UL1061	28	green	500
8	-	-	-	-
9	-	-	-	-
10	UL1061	28	black	500

●Model number  
**H-SN-33**

Housing : PHDR-10VS(J.S.T.)  
Pin : SPHD-002T-P0.5(J.S.T.)  
Weight : 6g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length $l$ (mm)
1	-	-	-	-
2	-	-	-	-
3	UL1061	28	orange	500
4	UL1061	28	purple	500
5	UL1061	28	yellow	500
6	UL1061	28	blue	500
7	UL1061	28	green	500
8	-	-	-	-
9	-	-	-	-
10	UL1061	28	black	500

●Model number  
**H-RC-5**

Housing : PHDR-10VS(J.S.T.)  
Pin : SPHD-002T-P0.5(J.S.T.)  
Weight : 3g max

●Type

●Wire

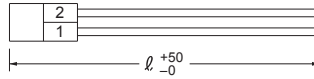
Pin #	Wire	AWG	Color	Length $l$ (mm)
1	-	-	-	-
2	-	-	-	-
3	UL1061	28	orange	500
4	UL1061	28	purple	500
5	-	-	-	-
6	-	-	-	-
7	-	-	-	-
8	-	-	-	-
9	-	-	-	-
10	-	-	-	-

●Model number

**H-SN-18**

Housing : PHR-2(J.S.T.)  
 Pin : SPH-002T-P0.5S(J.S.T.)  
 Weight : 4g max

●Type



●Wire

Pin #	Wire	AWG	Color	Length $l$ (mm)
1	UL1007	26	yellow	500
2	UL1007	26	orange	500

Harness to use the function is prepared in GHA & GMA series.

## GHA Series GMA Series

### Mating harness

Standard type (GHA series : Molex connector, GMA series : Tyco connector)

Model	Harness model #	Contents
GHA300F, GHA500F	H-IN-17	Input harness
	H-SN-34	Harness for using all functions.
	H-SN-35	Harness for using AUX (5V) remote control and PG terminal.
	H-SN-56	Harness for using all functions. (J2)
	H-SN-57	Harness for using AUX (5V) remote control and PG terminal. (J2)
GMA300F	H-IN-24	Input harness
	H-SN-18	Harness for using AUX (12V).
	H-SN-38	Harness for using all functions.

-J type (J.S.T. connector)

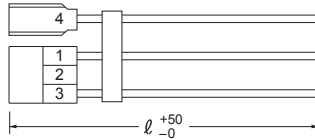
Model	Harness model #	Contents
GHA300F, GHA500F	H-IN-18	Input harness
	H-SN-38	Harness for using all functions.
	H-SN-39	Harness for using AUX(5V) remote control and PG terminal.
GMA300F	H-IN-18	Input harness
	H-SN-18	Harness for using AUX (12V).
	H-SN-38	Harness for using all functions.

●Model number

### H-IN-17

Housing : 09-50-8031 (Molex)  
 Pin (1-3) : 08-50-0105 (Molex)  
               : 08-65-0114 (Molex)  
 (4) : 170603-2 (Tyco Electronics)  
 Weight : 25g max

●Type



●Wire

Pin #	Wire	AWG	Color	Length $l$ (mm)
1	UL3239	18	black	500
2				
3	UL3239	18	white	500
4	UL3239	18	green	500

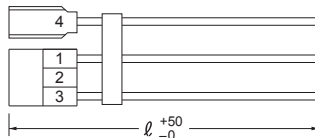
\*The color becomes the light hue.

●Model number

### H-IN-18

Housing : VHR-3N (J.S.T.)  
 Pin (1-3) : SVH-21T-P1.1 (J.S.T.)  
 (4) : 170603-2 (Tyco Electronics)  
 Weight : 35g max

●Type



●Wire

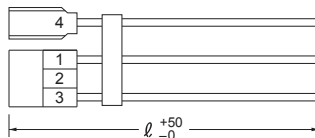
Pin #	Wire	AWG	Color	Length $l$ (mm)
1	UL1015	18	black	500
2				
3	UL1015	18	white	500
4	UL1015	18	green	500

●Model number

### H-IN-24

Housing : 1-1123722-3 (Tyco Electronics)  
 Pin (1-3) : 1123721-1 (Tyco Electronics)  
 (4) : 170603-2 (Tyco Electronics)  
 Weight : 35g max

●Type



●Wire

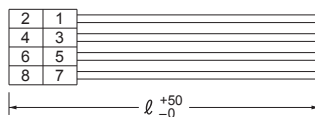
Pin #	Wire	AWG	Color	Length $l$ (mm)
1	UL1015	18	black	500
2				
3	UL1015	18	white	500
4	UL1015	18	green	500

●Model number

### H-SN-34

Housing : 51110-0851 (Molex)  
 Pin : 50394-8051 (Molex)  
 Weight : 8g max

●Type



●Wire

Pin #	Wire	AWG	Color	Length $l$ (mm)
1	UL1061	28	red	500
2	UL1061	28	black	500
3	UL1061	28	blue	500
4	UL1061	28	brown	500
5	UL1061	28	yellow	500
6	UL1061	28	gray	500
7	UL1061	28	orange	500
8	UL1061	28	purple	500

●Model number  
**H-SN-56**

Housing : 51110-0860 (Molex)  
Pin : 50394-8051 (Molex)  
Weight : 8g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length $l$ (mm)
1	UL1061	28	red	500
2	UL1061	28	black	500
3	UL1061	28	blue	500
4	UL1061	28	brown	500
5	UL1061	28	yellow	500
6	UL1061	28	gray	500
7	UL1061	28	orange	500
8	UL1061	28	purple	500

●Model number  
**H-SN-35**

Housing : 51110-0851 (Molex)  
Pin : 50394-8051 (Molex)  
Weight : 6g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length $l$ (mm)
1				
2				
3	UL1061	28	blue	500
4	UL1061	28	brown	500
5	UL1061	28	yellow	500
6	UL1061	28	gray	500
7	UL1061	28	orange	500
8	UL1061	28	purple	500

●Model number  
**H-SN-57**

Housing : 51110-0860 (Molex)  
Pin : 50394-8051 (Molex)  
Weight : 6g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length $l$ (mm)
1				
2				
3	UL1061	28	blue	500
4	UL1061	28	brown	500
5	UL1061	28	yellow	500
6	UL1061	28	gray	500
7	UL1061	28	orange	500
8	UL1061	28	purple	500

●Model number  
**H-SN-38**

Housing : PHDR-08VS (J.S.T.)  
Pin : SPHD-002T-P0.5 (J.S.T.)  
Weight : 8g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length $l$ (mm)
1	UL1061	28	red	500
2	UL1061	28	black	500
3	UL1061	28	blue	500
4	UL1061	28	brown	500
5	UL1061	28	yellow	500
6	UL1061	28	gray	500
7	UL1061	28	orange	500
8	UL1061	28	purple	500

●Model number  
**H-SN-39**

Housing : PHDR-08VS (J.S.T.)  
Pin : SPHD-002T-P0.5 (J.S.T.)  
Weight : 6g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length $l$ (mm)
1				
2				
3	UL1061	28	blue	500
4	UL1061	28	brown	500
5	UL1061	28	yellow	500
6	UL1061	28	gray	500
7	UL1061	28	orange	500
8	UL1061	28	purple	500

●Model number  
**H-SN-18**

Housing : PHR-2(J.S.T.)  
Pin : SPH-002T-P0.5S(J.S.T.)  
Weight : 4g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length $l$ (mm)
1	UL1007	26	yellow	500
2	UL1007	26	orange	500

# FETA Series

## Mating harness

Model	Harness model #	Contents
FE series	H-SN-47	Harness for using all functions of CN1 and CN2 (Single side housing)
	H-SN-55	Harness for using all functions of CN1 and CN2 (Both side housing)
	H-PA-12	Harness for parallel operation
	H-PA-13	Harness for parallel operation and using all other functions of CN1 and CN2

●Model number  
**H-SN-47**

Housing : PUDP-12V-S(J.S.T.)  
Pin : SPUD-002T-P0.5(J.S.T.)  
Weight : 13g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1061	28	white	500
2	UL1061	28	pink	500
3	UL1061	28	brown	500
4	UL1061	28	yellow	500
5	UL1061	28	gray	500
6	UL1061	28	orange	500
7	UL1061	28	purple	500
8	UL1061	28	red	500
9	UL1061	28	black	500
10	UL1061	28	blue	500
11	UL1061	28	yellow	500
12	UL1061	28	green	500

---

●Model number  
**H-SN-55**

Housing : PUDP-12V-S(J.S.T.)  
Pin : SPUD-002T-P0.5(J.S.T.)  
Tube : E-651U-1(NIKKAN INDUSTRIES)  
Weight : 12g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL10368	28	red	200
2	UL10368	28	white	200
3	UL10368	28	white	200
4	UL10368	28	white	200
5	UL10368	28	white	200
6	UL10368	28	white	200
7	UL10368	28	white	200
8	UL10368	28	white	200
9	UL10368	28	white	200
10	UL10368	28	white	200
11	UL10368	28	white	200
12	UL10368	28	white	200

---

●Model number  
**H-PA-12**

Housing : PUDP-12V-S(J.S.T.)  
Pin : SPUD-002T-P0.5(J.S.T.)  
Weight : 5g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	-	-	-	-
2	-	-	-	-
3	-	-	-	-
4	-	-	-	-
5	-	-	-	-
6	-	-	-	-
7	UL1061	28	purple	210
8	UL1061	28	red	210
9	UL1061	28	black	210
10	UL1061	28	blue	210
11	UL1061	28	yellow	210
12	UL1061	28	green	210

---

●Model number  
**H-PA-13**

Housing : PUDP-12V-S(J.S.T.)  
Pin : SPUD-002T-P0.5(J.S.T.)  
Weight : 16g max

●Type

\* Terminals of Pin #1 - #6 in CN1 and CN2 are opened.  
\* Pin #7 - #12 in CN1 are connected to same pins in CN2 by harness.

●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1061	28	white	500
2	UL1061	28	pink	500
3	UL1061	28	brown	500
4	UL1061	28	yellow	500
5	UL1061	28	gray	500
6	UL1061	28	orange	500
7	UL1061	28	purple	210
8	UL1061	28	red	210
9	UL1061	28	black	210
10	UL1061	28	blue	210
11	UL1061	28	yellow	210
12	UL1061	28	green	210

Option-42

October 26, 2021

Harness to use the function is prepared in PCA series.

# PCA Series

## Mating harness

Model	Harness model #	Contents	Model	Harness model #	Contents
PCA300F PCA600F PCA1000F PCA1500F	H-PA-14	· Harness for abnormal protection of series operation	PCA600F-□-P2	H-PA-14	Harness for series operation and parallel operation (master-slave operation)
	H-PA-15	Harness for parallel operation and N+1 parallel redundancy operation		H-SN-48	Harness for using all functions of CN1 and CN2
	H-PA-16	Harness for master-slave operation of parallel operation (-P3 option)		H-SN-49	Harness for using all functions except remote sensing of CN1 and CN2
	H-SN-48	Harness for using all functions of CN1 and CN2		H-SN-50	Harness for using all functions of CN3
	H-SN-49	Harness for using all functions except remote sensing of CN1 and CN2		H-SN-51	Harness for using all functions of CN4
	H-SN-50	Harness for using all functions of CN3		H-SN-52	Harness for using example remote ON/OFF circuit (C)
	H-SN-51	Harness for using all functions of CN4		H-SN-53	Harness for use in slave setting of master-slave operation
	H-SN-52	Harness for using example remote ON/OFF circuit (C)		H-SN-54	Harness for use in effective setting of external output voltage adjustment
	H-SN-53	Harness for use in slave setting of master-slave operation (-P3 option)			
	H-SN-54	Harness for use in effective setting of external output voltage adjustment			
H-SN-66	Harness for using PMBus communication (-I option)				

●Model number

## H-PA-14

Housing : PHDR-12VS (J.S.T.)  
Pin : SPHD-002T-P0.5 (J.S.T.)  
Weight : 3g max

●External view

●Wiring diagram

●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	-	-	-	-
2	-	-	-	-
3	-	-	-	-
4	-	-	-	-
5	-	-	-	-
6	-	-	-	-
7	UL1061	28	pink	180
8	-	-	-	-
9	UL1061	28	yellow	180
10	UL1061	28	gray	180
11	UL1061	28	orange	180
12	UL1061	28	purple	180

●Model number

## H-PA-15

Housing : PHDR-12VS (J.S.T.)  
Pin : SPHD-002T-P0.5 (J.S.T.)  
Weight : 3g max

●External view

●Wiring diagram

●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	-	-	-	-
2	-	-	-	-
3	-	-	-	-
4	-	-	-	-
5	UL1061	28	blue	180
6	UL1061	28	black	180
7	UL1061	28	pink	180
8	UL1061	28	green	180
9	-	-	-	-
10	UL1061	28	gray	180
11	UL1061	28	orange	180
12	UL1061	28	purple	180

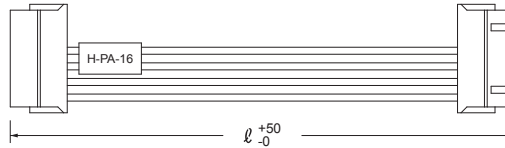


●Model number

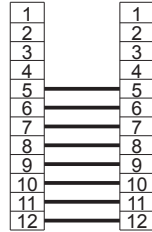
# H-PA-16

Housing : PHDR-12VS (J.S.T.)  
 Pin : SPHD-002T-P0.5 (J.S.T.)  
 Weight : 3g max

●External view



●Wiring diagram



●Wire

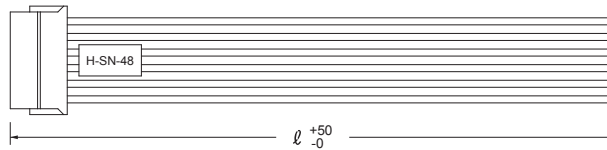
Pin #	Wire	AWG	Color	Length ℓ (mm)
1	-	-	-	-
2	-	-	-	-
3	-	-	-	-
4	-	-	-	-
5	UL1061	28	blue	180
6	UL1061	28	black	180
7	UL1061	28	pink	180
8	UL1061	28	green	180
9	UL1061	28	yellow	180
10	UL1061	28	gray	180
11	UL1061	28	orange	180
12	UL1061	28	purple	180

●Model number

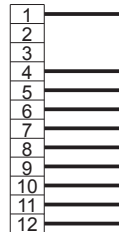
# H-SN-48

Housing : PHDR-12VS (J.S.T.)  
 Pin : SPHD-002T-P0.5 (J.S.T.)  
 Weight : 10g max

●External view



●Wiring diagram



●Wire

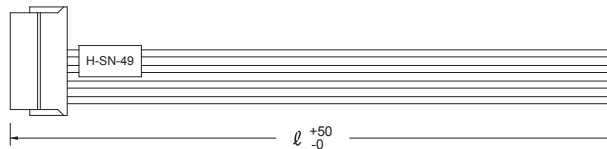
Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1061	28	red	500
2	-	-	-	-
3	-	-	-	-
4	UL1061	28	black	500
5	UL1061	28	blue	500
6	UL1061	28	black	500
7	UL1061	28	pink	500
8	UL1061	28	green	500
9	UL1061	28	yellow	500
10	UL1061	28	brown	500
11	UL1061	28	orange	500
12	UL1061	28	purple	500

●Model number

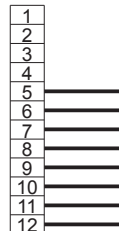
# H-SN-49

Housing : PHDR-12VS (J.S.T.)  
 Pin : SPHD-002T-P0.5 (J.S.T.)  
 Weight : 10g max

●External view



●Wiring diagram



●Wire

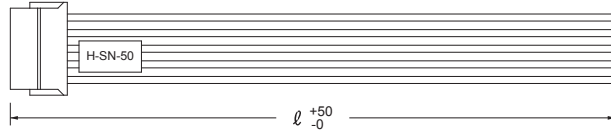
Pin #	Wire	AWG	Color	Length ℓ (mm)
1	-	-	-	-
2	-	-	-	-
3	-	-	-	-
4	-	-	-	-
5	UL1061	28	blue	500
6	UL1061	28	black	500
7	UL1061	28	pink	500
8	UL1061	28	green	500
9	UL1061	28	yellow	500
10	UL1061	28	brown	500
11	UL1061	28	orange	500
12	UL1061	28	purple	500

●Model number

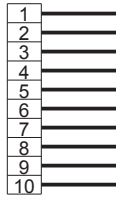
# H-SN-50

Housing : PHDR-10VS (J.S.T.)  
 Pin : SPHD-002T-P0.5 (J.S.T.)  
 Weight : 8g max

●External view



●Wiring diagram



●Wire

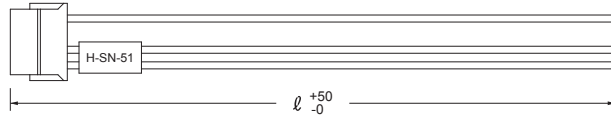
Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1061	24	orange	500
2	UL1061	24	white	500
3	UL1061	28	blue	500
4	UL1061	24	white	500
5	UL1061	28	yellow	500
6	UL1061	28	gray	500
7	UL1061	28	orange	500
8	UL1061	28	black	500
9	UL1061	28	purple	500
10	UL1061	28	green	500

●Model number

# H-SN-51

Housing : PHDR-08VS (J.S.T.)  
 Pin : SPHD-002T-P0.5 (J.S.T.)  
 Weight : 6g max

●External view



●Wiring diagram



●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	-	-	-	-
2	UL1061	28	brown	500
3	-	-	-	-
4	-	-	-	-
5	UL1061	28	blue	500
6	UL1061	28	orange	500
7	UL1061	28	pink	500
8	UL1061	28	brown	500

●Model number

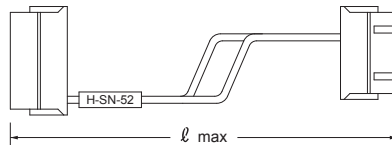
# H-SN-52

CN A :  
 Housing : PHDR-12VS (J.S.T.)  
 Pin : SPHD-002T-P0.5 (J.S.T.)

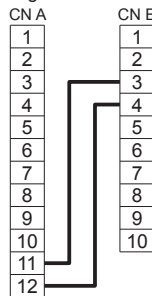
CN B :  
 Housing : PHDR-10VS (J.S.T.)  
 Pin : SPHD-002T-P0.5 (J.S.T.)

Weight : 3g max

●External view



●Wiring diagram



●Wire

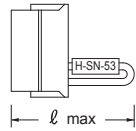
Pin #	Wire	AWG	Color	Length ℓ (mm)	
CN A	1	-	-	-	
	2	-	-	-	
	3	-	-	-	
	4	-	-	-	
	5	-	-	-	
	6	-	-	-	
	7	-	-	-	
	8	-	-	-	
	9	-	-	-	
	10	-	-	-	
	11	UL1061	28	black	70
	12	UL1061	28	black	70
CN B	1	-	-	-	
	2	-	-	-	
	3	UL1061	28	black	70
	4	UL1061	28	black	70
	5	-	-	-	
	6	-	-	-	
	7	-	-	-	
	8	-	-	-	
	9	-	-	-	
	10	-	-	-	

●Model number

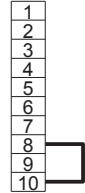
# H-SN-53

Housing : PHDR-10VS (J.S.T.)  
 Pin : SPHD-002T-P0.5 (J.S.T.)  
 Weight : 3g max

●External view



●Wiring diagram



●Wire

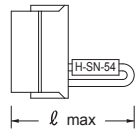
Pin #	Wire	AWG	Color	Length ℓ (mm)
1	-	-	-	-
2	-	-	-	-
3	-	-	-	-
4	-	-	-	-
5	-	-	-	-
6	-	-	-	-
7	-	-	-	-
8	UL1061	28	green	30
9	-	-	-	-
10	UL1061	28	green	30

●Model number

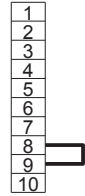
# H-SN-54

Housing : PHDR-10VS (J.S.T.)  
 Pin : SPHD-002T-P0.5 (J.S.T.)  
 Weight : 3g max

●External view



●Wiring diagram



\* Pin #8 and #9 are connected by harness.

●Wire

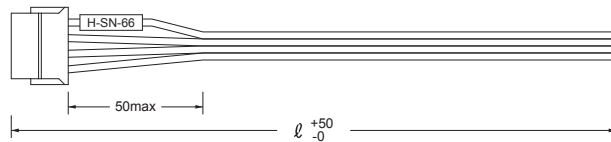
Pin #	Wire	AWG	Color	Length ℓ (mm)
1	-	-	-	-
2	-	-	-	-
3	-	-	-	-
4	-	-	-	-
5	-	-	-	-
6	-	-	-	-
7	-	-	-	-
8	UL1061	28	purple	30
9	UL1061	28	purple	30
10	-	-	-	-

●Model number

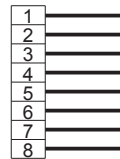
# H-SN-66

Housing : PHDR-08VS (J.S.T.)  
 Pin : SPHD-002T-P0.5 (J.S.T.)  
 Weight : 8g max

●External view



●Wiring diagram



●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL2651	28	brown	500
2	UL2651	28	red	500
3	UL2651	28	orange	500
4	UL2651	28	yellow	500
5	UL2651	28	green	500
6	UL2651	28	blue	500
7	UL2651	28	purple	500
8	UL2651	28	gray	500

# AME Series

## Mating harness

Model	Harness model #	Contents
AME	H-SN-58	Harness for functions (AUX, GI, PR, INFO (for -I3 option)) in CN1
	H-SN-59	Harness for functions in CN3 (for Output module A-D,J-M)
	H-SN-60	Harness for functions in CN3 (for Output module E4-H4,E-H)
	H-SN-68	Harness for functions in CN3 (for Output module R)
	H-SN-51	Harness for functions in CN2 (for -I3 option)
	H-SN-66	Harness for functions in CN2 (for -I option)
	H-SN-61	Molex housing version of H-SN-58 (for -J3 option)
	H-SN-62	Molex housing version of H-SN-59 (for -J3 option of output module A-D,J-M)
	H-SN-63	Molex housing version of H-SN-60 (for -J3 option of output module E4-H4,E-H)
	H-SN-69	Molex housing version of H-SN-68 (for -J3 option of output module R)
	H-SN-65	Molex housing version of H-SN-51 (for -I3J3 option)
	H-SN-67	Molex housing version of H-SN-66 (for -I3J3 option)
	H-OU-42	Output harness (for -J2 option of output module A-D,K-M)
H-OU-43	Output harness (for -J2 option of output module E4-H4,E-H,J)	
H-OU-52	Output harness (for -J2 option of output module R)	

●Model number

## H-SN-58

Housing : PHDR-10VS (J.S.T.)  
Pin : SPHD-002T-P0.5 (J.S.T.)  
Weight : 8g max

●External view

●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1061	AWG24	orange	500
2	UL1061	AWG24	white	500
3	UL1061	AWG28	blue	500
4	UL1061	AWG24	white	500
5	UL1061	AWG28	green	500
6	UL1061	AWG28	purple	500
7	UL1061	AWG28	pink	500
8	UL1061	AWG28	brown	500
9	UL1061	AWG28	yellow	500
10	UL1061	AWG28	gray	500

●Wiring diagram

●Model number

## H-SN-59

Housing : PHDR-10VS (J.S.T.)  
Pin : SPHD-002T-P0.5 (J.S.T.)  
Weight : 4g max

●External view

●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1061	AWG28	yellow	500
2	UL1061	AWG28	orange	500
3	UL1061	AWG28	blue	500
4	UL1061	AWG28	gray	500
5	-	-	-	-
6	-	-	-	-
7	-	-	-	-
8	-	-	-	-
9	-	-	-	-
10	-	-	-	-

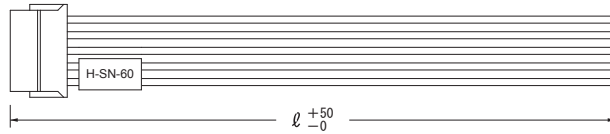
●Wiring diagram

●Model number

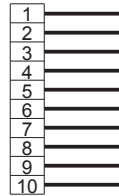
# H-SN-60

Housing : PHDR-10VS (J.S.T.)  
 Pin : SPHD-002T-P0.5 (J.S.T.)  
 Weight : 8g max

●External view



●Wiring diagram



●Wire

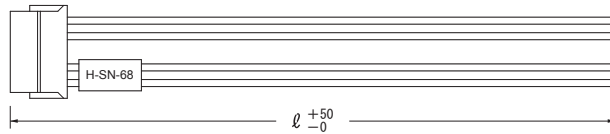
Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1061	AWG28	yellow	500
2	UL1061	AWG28	orange	500
3	UL1061	AWG28	blue	500
4	UL1061	AWG28	gray	500
5	UL1061	AWG28	red	500
6	UL1061	AWG28	black	500
7	UL1061	AWG28	brown	500
8	UL1061	AWG28	green	500
9	UL1061	AWG28	purple	500
10	UL1061	AWG28	white	500

●Model number

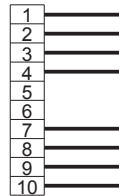
# H-SN-68

Housing : PHDR-10VS (J.S.T.)  
 Pin : SPHD-002T-P0.5 (J.S.T.)  
 Weight : 8g max

●External view



●Wiring diagram



●Wire

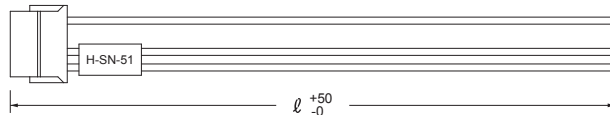
Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1061	AWG28	yellow	500
2	UL1061	AWG28	orange	500
3	UL1061	AWG28	blue	500
4	UL1061	AWG28	gray	500
5	-	-	-	-
6	-	-	-	-
7	UL1061	AWG28	brown	500
8	UL1061	AWG28	green	500
9	UL1061	AWG28	purple	500
10	UL1061	AWG28	white	500

●Model number

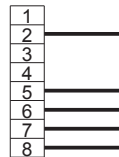
# H-SN-51

Housing : PHDR-08VS (J.S.T.)  
 Pin : SPHD-002T-P0.5 (J.S.T.)  
 Weight : 6g max

●External view



●Wiring diagram



●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	-	-	-	-
2	UL1061	AWG28	brown	500
3	-	-	-	-
4	-	-	-	-
5	UL1061	AWG28	blue	500
6	UL1061	AWG28	orange	500
7	UL1061	AWG28	pink	500
8	UL1061	AWG28	brown	500

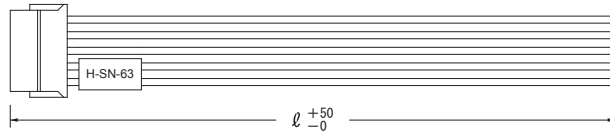
<p>●Model number <b>H-SN-66</b> Housing : PHDR-08VS (J.S.T) Pin : SPHD-002T-P0.5 (J.S.T) Weight : 8g max</p>	<p>●External view</p>																																																							
<p>●Wiring diagram</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr><td>1</td><td>UL2651</td><td>28</td><td>brown</td><td>500</td></tr> <tr><td>2</td><td>UL2651</td><td>28</td><td>red</td><td>500</td></tr> <tr><td>3</td><td>UL2651</td><td>28</td><td>orange</td><td>500</td></tr> <tr><td>4</td><td>UL2651</td><td>28</td><td>yellow</td><td>500</td></tr> <tr><td>5</td><td>UL2651</td><td>28</td><td>green</td><td>500</td></tr> <tr><td>6</td><td>UL2651</td><td>28</td><td>blue</td><td>500</td></tr> <tr><td>7</td><td>UL2651</td><td>28</td><td>purple</td><td>500</td></tr> <tr><td>8</td><td>UL2651</td><td>28</td><td>gray</td><td>500</td></tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL2651	28	brown	500	2	UL2651	28	red	500	3	UL2651	28	orange	500	4	UL2651	28	yellow	500	5	UL2651	28	green	500	6	UL2651	28	blue	500	7	UL2651	28	purple	500	8	UL2651	28	gray	500										
Pin #	Wire	AWG	Color	Length ℓ (mm)																																																				
1	UL2651	28	brown	500																																																				
2	UL2651	28	red	500																																																				
3	UL2651	28	orange	500																																																				
4	UL2651	28	yellow	500																																																				
5	UL2651	28	green	500																																																				
6	UL2651	28	blue	500																																																				
7	UL2651	28	purple	500																																																				
8	UL2651	28	gray	500																																																				
<p>●Model number <b>H-SN-61</b> Housing : 51110-1056 (Molex) Pin : 50394-8051 (Molex) Weight : 8g max</p>	<p>●External view</p>																																																							
<p>●Wiring diagram</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr><td>1</td><td>UL1061</td><td>AWG24</td><td>orange</td><td>500</td></tr> <tr><td>2</td><td>UL1061</td><td>AWG24</td><td>white</td><td>500</td></tr> <tr><td>3</td><td>UL1061</td><td>AWG28</td><td>blue</td><td>500</td></tr> <tr><td>4</td><td>UL1061</td><td>AWG24</td><td>white</td><td>500</td></tr> <tr><td>5</td><td>UL1061</td><td>AWG28</td><td>green</td><td>500</td></tr> <tr><td>6</td><td>UL1061</td><td>AWG28</td><td>purple</td><td>500</td></tr> <tr><td>7</td><td>UL1061</td><td>AWG28</td><td>pink</td><td>500</td></tr> <tr><td>8</td><td>UL1061</td><td>AWG28</td><td>brown</td><td>500</td></tr> <tr><td>9</td><td>UL1061</td><td>AWG28</td><td>yellow</td><td>500</td></tr> <tr><td>10</td><td>UL1061</td><td>AWG28</td><td>gray</td><td>500</td></tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1061	AWG24	orange	500	2	UL1061	AWG24	white	500	3	UL1061	AWG28	blue	500	4	UL1061	AWG24	white	500	5	UL1061	AWG28	green	500	6	UL1061	AWG28	purple	500	7	UL1061	AWG28	pink	500	8	UL1061	AWG28	brown	500	9	UL1061	AWG28	yellow	500	10	UL1061	AWG28	gray	500
Pin #	Wire	AWG	Color	Length ℓ (mm)																																																				
1	UL1061	AWG24	orange	500																																																				
2	UL1061	AWG24	white	500																																																				
3	UL1061	AWG28	blue	500																																																				
4	UL1061	AWG24	white	500																																																				
5	UL1061	AWG28	green	500																																																				
6	UL1061	AWG28	purple	500																																																				
7	UL1061	AWG28	pink	500																																																				
8	UL1061	AWG28	brown	500																																																				
9	UL1061	AWG28	yellow	500																																																				
10	UL1061	AWG28	gray	500																																																				
<p>●Model number <b>H-SN-62</b> Housing : 51110-1056 (Molex) Pin : 50394-8051 (Molex) Weight : 4g max</p>	<p>●External view</p>																																																							
<p>●Wiring diagram</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr><td>1</td><td>UL1061</td><td>AWG28</td><td>yellow</td><td>500</td></tr> <tr><td>2</td><td>UL1061</td><td>AWG28</td><td>orange</td><td>500</td></tr> <tr><td>3</td><td>UL1061</td><td>AWG28</td><td>blue</td><td>500</td></tr> <tr><td>4</td><td>UL1061</td><td>AWG28</td><td>gray</td><td>500</td></tr> <tr><td>5</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>6</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>7</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>8</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>9</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> <tr><td>10</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1061	AWG28	yellow	500	2	UL1061	AWG28	orange	500	3	UL1061	AWG28	blue	500	4	UL1061	AWG28	gray	500	5	-	-	-	-	6	-	-	-	-	7	-	-	-	-	8	-	-	-	-	9	-	-	-	-	10	-	-	-	-
Pin #	Wire	AWG	Color	Length ℓ (mm)																																																				
1	UL1061	AWG28	yellow	500																																																				
2	UL1061	AWG28	orange	500																																																				
3	UL1061	AWG28	blue	500																																																				
4	UL1061	AWG28	gray	500																																																				
5	-	-	-	-																																																				
6	-	-	-	-																																																				
7	-	-	-	-																																																				
8	-	-	-	-																																																				
9	-	-	-	-																																																				
10	-	-	-	-																																																				

●Model number

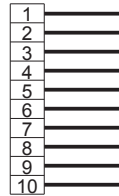
# H-SN-63

Housing : 51110-1056 (Molex)  
 Pin : 50394-8051 (Molex)  
 Weight : 8g max

●External view



●Wiring diagram



●Wire

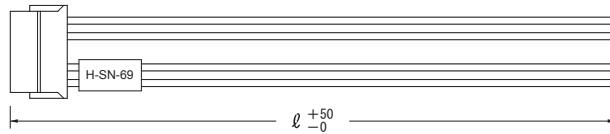
Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1061	AWG28	yellow	500
2	UL1061	AWG28	orange	500
3	UL1061	AWG28	blue	500
4	UL1061	AWG28	gray	500
5	UL1061	AWG28	red	500
6	UL1061	AWG28	black	500
7	UL1061	AWG28	brown	500
8	UL1061	AWG28	green	500
9	UL1061	AWG28	purple	500
10	UL1061	AWG28	white	500

●Model number

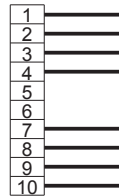
# H-SN-69

Housing : 51110-1056 (Molex)  
 Pin : 50394-8051 (Molex)  
 Weight : 8g max

●External view



●Wiring diagram



●Wire

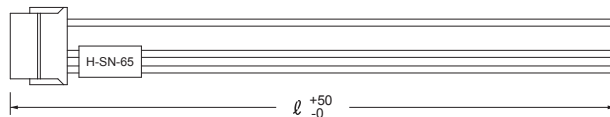
Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1061	AWG28	yellow	500
2	UL1061	AWG28	orange	500
3	UL1061	AWG28	blue	500
4	UL1061	AWG28	gray	500
5	-	-	-	-
6	-	-	-	-
7	UL1061	AWG28	brown	500
8	UL1061	AWG28	green	500
9	UL1061	AWG28	purple	500
10	UL1061	AWG28	white	500

●Model number

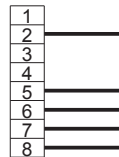
# H-SN-65

Housing : 51110-0856 (Molex)  
 Pin : 50394-8051 (Molex)  
 Weight : 6g max

●External view



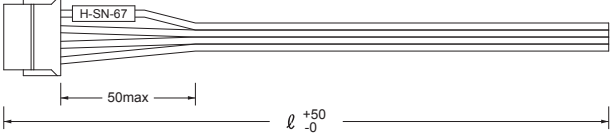
●Wiring diagram

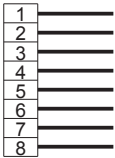


●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	-	-	-	-
2	UL1061	AWG28	brown	500
3	-	-	-	-
4	-	-	-	-
5	UL1061	AWG28	blue	500
6	UL1061	AWG28	orange	500
7	UL1061	AWG28	pink	500
8	UL1061	AWG28	brown	500

●Model number  
**H-SN-67**  
 Housing : 51110-0856 (Molex)  
 Pin : 50394-8051 (Molex)  
 Weight : 8g max

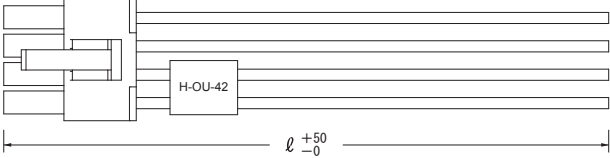
●External view  



●Wiring diagram  


●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL2651	28	brown	500
2	UL2651	28	red	500
3	UL2651	28	orange	500
4	UL2651	28	yellow	500
5	UL2651	28	green	500
6	UL2651	28	blue	500
7	UL2651	28	purple	500
8	UL2651	28	gray	500

●Model number  
**H-OU-42**  
 Housing : 39014041 (Molex)  
 Pin : 45750-3111 (Molex)  
 Weight : 40g max

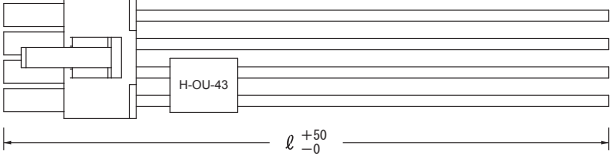
●External view  


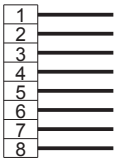
●Wiring diagram  


●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1430	AWG16	black	500
2	UL1430	AWG16	black	500
3	UL1430	AWG16	red	500
4	UL1430	AWG16	red	500

●Model number  
**H-OU-43**  
 Housing : 39012085 (Molex)  
 Pin : 45750-3111 (Molex)  
 Weight : 80g max

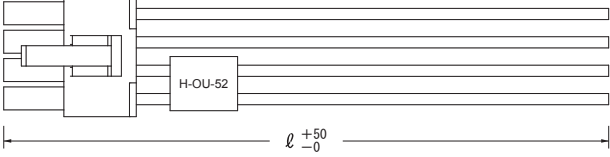
●External view  


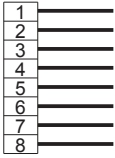
●Wiring diagram  


●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1430	AWG16	black	500
2	UL1430	AWG16	black	500
3	UL1430	AWG16	red	500
4	UL1430	AWG16	red	500
5	UL1430	AWG16	black	500
6	UL1430	AWG16	black	500
7	UL1430	AWG16	red	500
8	UL1430	AWG16	red	500

●Model number  
**H-OU-52**  
 Housing : 39012085 (Molex)  
 Pin : 45750-3111 (Molex)  
 Weight : 80g max

●External view  


●Wiring diagram  


●Wire

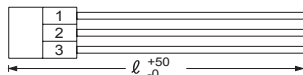
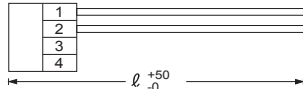
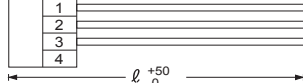
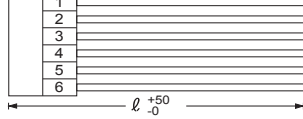
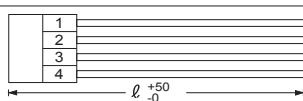
Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1430	AWG16	black	500
2	UL1430	AWG16	red	500
3	UL1430	AWG16	black	500
4	UL1430	AWG16	red	500
5	UL1430	AWG16	black	500
6	UL1430	AWG16	red	500
7	UL1430	AWG16	black	500
8	UL1430	AWG16	red	500



## Mating harness

Model	Harness model #	Contents
RBC200F RBC300F	H-IN-5	Input harness (ground wire : green)
	H-IN-10	Input harness (ground wire : green/yellow)
	H-IN-25	Harness for connecting the external capacitor unit (CR-HUT).
	H-OU-41	Output harness (for V3)
RBC200F	H-OU-39	Output harness (for V1 · V2)
	H-OU-40	Output harness (for V1 · ±V2)
	H-SN-64	Harness for using Remote control / Alarm / Communication · For Remote control Use only pin # 1 and 3 · For Alarm and Communication Use only pin # 2 and 3
RBC300F	H-OU-49	Output harness (for V2)
	H-OU-50	Output harness (for ±V2)
	H-OU-51	Output harness (for V1)
	H-SN-70	Harness for using Remote control / Alarm / Communication · For Remote control Use only pin # 1 and 3 · For Alarm and Communication Use only pin # 2 and 3

<p>●Model number <b>H-IN-5</b> Housing : VHR-5N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 30g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>UL1015</td> <td>18</td> <td>white</td> <td>500</td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>UL1015</td> <td>18</td> <td>green</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1015	18	black	500	2					3	UL1015	18	white	500	4					5	UL1015	18	green	500		
Pin #	Wire	AWG	Color	Length ℓ (mm)																														
1	UL1015	18	black	500																														
2																																		
3	UL1015	18	white	500																														
4																																		
5	UL1015	18	green	500																														
<p>●Model number <b>H-IN-10</b> Housing : VHR-5N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 30g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>UL1015</td> <td>18</td> <td>white</td> <td>500</td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>UL1015</td> <td>18</td> <td>green/yellow</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1015	18	black	500	2					3	UL1015	18	white	500	4					5	UL1015	18	green/yellow	500		
Pin #	Wire	AWG	Color	Length ℓ (mm)																														
1	UL1015	18	black	500																														
2																																		
3	UL1015	18	white	500																														
4																																		
5	UL1015	18	green/yellow	500																														
<p>●Model number <b>H-IN-25</b> CN A: Housing : VHR-3N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) CN B: Housing : VHR-4N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 5g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td rowspan="3">CN A</td> <td>1</td> <td>UL1015</td> <td>20</td> <td>black</td> <td>100</td> </tr> <tr> <td>2</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>UL1015</td> <td>20</td> <td>red</td> <td>100</td> </tr> <tr> <td rowspan="2">CN B</td> <td>1</td> <td>UL1015</td> <td>20</td> <td>black</td> <td>100</td> </tr> <tr> <td>4</td> <td>UL1015</td> <td>20</td> <td>red</td> <td>100</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	CN A	1	UL1015	20	black	100	2					3	UL1015	20	red	100	CN B	1	UL1015	20	black	100	4	UL1015	20	red	100
Pin #	Wire	AWG	Color	Length ℓ (mm)																														
CN A	1	UL1015	20	black	100																													
	2																																	
	3	UL1015	20	red	100																													
CN B	1	UL1015	20	black	100																													
	4	UL1015	20	red	100																													
<p>●Model number <b>H-OU-41</b> Housing : VHR-2N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 20g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> <tr> <td>2</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1015	18	red	500	2	UL1015	18	black	500																	
Pin #	Wire	AWG	Color	Length ℓ (mm)																														
1	UL1015	18	red	500																														
2	UL1015	18	black	500																														
<p>●Model number <b>H-OU-39</b> Housing : VHR-7N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 70g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1, 2</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> <tr> <td>3, 4</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>5</td> <td>UL1015</td> <td>18</td> <td>orange</td> <td>500</td> </tr> <tr> <td>6</td> <td>UL1015</td> <td>18</td> <td>gray</td> <td>500</td> </tr> <tr> <td>7</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1, 2	UL1015	18	red	500	3, 4	UL1015	18	black	500	5	UL1015	18	orange	500	6	UL1015	18	gray	500	7						
Pin #	Wire	AWG	Color	Length ℓ (mm)																														
1, 2	UL1015	18	red	500																														
3, 4	UL1015	18	black	500																														
5	UL1015	18	orange	500																														
6	UL1015	18	gray	500																														
7																																		
<p>●Model number <b>H-OU-40</b> Housing : VHR-7N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 70g max</p>	<p>●Type</p>	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1, 2</td> <td>UL1015</td> <td>18</td> <td>red</td> <td>500</td> </tr> <tr> <td>3, 4</td> <td>UL1015</td> <td>18</td> <td>black</td> <td>500</td> </tr> <tr> <td>5</td> <td>UL1015</td> <td>18</td> <td>orange</td> <td>500</td> </tr> <tr> <td>6</td> <td>UL1015</td> <td>18</td> <td>gray</td> <td>500</td> </tr> <tr> <td>7</td> <td>UL1015</td> <td>18</td> <td>purple</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1, 2	UL1015	18	red	500	3, 4	UL1015	18	black	500	5	UL1015	18	orange	500	6	UL1015	18	gray	500	7	UL1015	18	purple	500		
Pin #	Wire	AWG	Color	Length ℓ (mm)																														
1, 2	UL1015	18	red	500																														
3, 4	UL1015	18	black	500																														
5	UL1015	18	orange	500																														
6	UL1015	18	gray	500																														
7	UL1015	18	purple	500																														

<p>●Model number <b>H-SN-64</b> Housing : PHR-3 (J.S.T.) Pin : SPH-002T-P0.5S (J.S.T.) Weight : 4g max</p>	<p>●Type</p> 	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1017</td> <td>26</td> <td>orange</td> <td>500</td> </tr> <tr> <td>2</td> <td>UL1017</td> <td>26</td> <td>yellow</td> <td>500</td> </tr> <tr> <td>3</td> <td>UL1017</td> <td>26</td> <td>blue</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1017	26	orange	500	2	UL1017	26	yellow	500	3	UL1017	26	blue	500															
Pin #	Wire	AWG	Color	Length ℓ (mm)																																	
1	UL1017	26	orange	500																																	
2	UL1017	26	yellow	500																																	
3	UL1017	26	blue	500																																	
<p>●Model number <b>H-OU-49</b> Housing : VHR-4N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 20g max</p>	<p>●Type</p> 	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1015</td> <td>18</td> <td>orange</td> <td>500</td> </tr> <tr> <td>2</td> <td>UL1015</td> <td>18</td> <td>gray</td> <td>500</td> </tr> <tr> <td>3</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1015	18	orange	500	2	UL1015	18	gray	500	3					4														
Pin #	Wire	AWG	Color	Length ℓ (mm)																																	
1	UL1015	18	orange	500																																	
2	UL1015	18	gray	500																																	
3																																					
4																																					
<p>●Model number <b>H-OU-50</b> Housing : VHR-4N (J.S.T.) Pin : SVH-21T-P1.1 (J.S.T.) Weight : 30g max</p>	<p>●Type</p> 	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1015</td> <td>18</td> <td>orange</td> <td>500</td> </tr> <tr> <td>2</td> <td>UL1015</td> <td>18</td> <td>gray</td> <td>500</td> </tr> <tr> <td>3</td> <td>UL1015</td> <td>18</td> <td>purple</td> <td>500</td> </tr> <tr> <td>4</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1015	18	orange	500	2	UL1015	18	gray	500	3	UL1015	18	purple	500	4														
Pin #	Wire	AWG	Color	Length ℓ (mm)																																	
1	UL1015	18	orange	500																																	
2	UL1015	18	gray	500																																	
3	UL1015	18	purple	500																																	
4																																					
<p>●Model number <b>H-OU-51</b> Housing : VHR-6N (J.S.T.) Pin : SVH-41T-P1.1 (J.S.T.) Weight : 65g max</p>	<p>●Type</p> 	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1430</td> <td>16</td> <td>red</td> <td>500</td> </tr> <tr> <td>2</td> <td>UL1430</td> <td>16</td> <td>red</td> <td>500</td> </tr> <tr> <td>3</td> <td>UL1430</td> <td>16</td> <td>red</td> <td>500</td> </tr> <tr> <td>4</td> <td>UL1430</td> <td>16</td> <td>black</td> <td>500</td> </tr> <tr> <td>5</td> <td>UL1430</td> <td>16</td> <td>black</td> <td>500</td> </tr> <tr> <td>6</td> <td>UL1430</td> <td>16</td> <td>black</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1430	16	red	500	2	UL1430	16	red	500	3	UL1430	16	red	500	4	UL1430	16	black	500	5	UL1430	16	black	500	6	UL1430	16	black	500
Pin #	Wire	AWG	Color	Length ℓ (mm)																																	
1	UL1430	16	red	500																																	
2	UL1430	16	red	500																																	
3	UL1430	16	red	500																																	
4	UL1430	16	black	500																																	
5	UL1430	16	black	500																																	
6	UL1430	16	black	500																																	
<p>●Model number <b>H-SN-70</b> Housing : PHR-4 (J.S.T.) Pin : SPH-002T-P0.5S (J.S.T.) Weight : 8g max</p>	<p>●Type</p> 	<p>●Wire</p> <table border="1"> <thead> <tr> <th>Pin #</th> <th>Wire</th> <th>AWG</th> <th>Color</th> <th>Length ℓ (mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>UL1017</td> <td>26</td> <td>orange</td> <td>500</td> </tr> <tr> <td>2</td> <td>UL1017</td> <td>26</td> <td>yellow</td> <td>500</td> </tr> <tr> <td>3</td> <td>UL1017</td> <td>26</td> <td>blue</td> <td>500</td> </tr> <tr> <td>4</td> <td>UL1017</td> <td>26</td> <td>gray</td> <td>500</td> </tr> </tbody> </table>	Pin #	Wire	AWG	Color	Length ℓ (mm)	1	UL1017	26	orange	500	2	UL1017	26	yellow	500	3	UL1017	26	blue	500	4	UL1017	26	gray	500										
Pin #	Wire	AWG	Color	Length ℓ (mm)																																	
1	UL1017	26	orange	500																																	
2	UL1017	26	yellow	500																																	
3	UL1017	26	blue	500																																	
4	UL1017	26	gray	500																																	

Harness to use the function of AEA Series is prepared.  
 \* Please see the our company home page or consult us about detailed information.

# AEA Series

## Mating harness

Model	Harness model #	Contents
AEA Series	H-PA-17	Harness for parallel operation
	H-IN-11	Input harness when I/O interface is connector type (option:-J)
	H-OU-53	Output harness when I/O interface is connector type (option:-J)
	H-SN-71	Harness for using functions of CN3 (option:-R3)

●Model number  
**H-PA-17**

Housing : PHR-2 (J.S.T.)  
 Pin : SPH-002T-P0.5S (J.S.T.)  
 Weight : 4g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length $l$ (mm)
1	UL1007	26	yellow	200
2	UL1007	26	orange	200

●Model number  
**H-IN-11**

Housing : 1-178129-6(TE Connectivity)  
 Pin : 1-175218-5 equivalent goods (TE Connectivity)  
 Weight : 45g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length $l$ (mm)
B 1	UL1015	18	white	500
A 1	UL1015	18	white	500
B 2	-	-	-	-
A 2	-	-	-	-
B 3	UL1015	18	black	500
A 3	UL1015	18	black	500

●Model number  
**H-OU-53**

Housing : 178289-6(TE connectivity)  
 Pin : 1-353717-5 equivalent goods (TE connectivity)  
 Weight : 120g max

●Type

●Wire

Pin #	Wire	AWG	Color	Length $l$ (mm)
B 1	UL1007	16	red	500
A 1	UL1007	16	red	500
B 2	UL1007	16	red	500
A 2	UL1007	16	red	500
B 3	UL1007	16	red	500
A 3	UL1007	16	red	500
B 4	UL1007	16	black	500
A 4	UL1007	16	black	500
B 5	UL1007	16	black	500
A 5	UL1007	16	black	500
B 6	UL1007	16	black	500
A 6	UL1007	16	black	500

●Model number  
**H-SN-71**

Housing : PHDR-12VS (J.S.T.)  
 Pin : SPHD-002T-P0.5 (J.S.T.)  
 Weight : 22g max

●External view

●Wiring diagram

●Wire

Pin #	Wire	AWG	Color	Length $l$ (mm)
1	UL1061	24	orange	500
2	UL1061	24	white	500
3	UL1061	24	red	500
4	UL1061	24	blue	500
5	UL1061	24	red	500
6	UL1061	24	blue	500
7	UL1061	28	brown	500
8	UL1061	28	green	500
9	UL1061	28	purple	500
10	UL1061	28	black	500
11	UL1061	28	yellow	500
12	UL1061	28	grey	500

# HCA Series

## Mating harness

Model	Harness model #	Contents
HCA3500TF	H-SN-74	Harness for using all functions of CN1 and CN2 (Single side housing)
	H-SN-75	Harness for using all functions of CN3 (Single side housing)
	H-PA-18	Harness for parallel operation (Both side housing)

●Model number  
**H-SN-74**

Housing : PDHR-08VS(J.S.T.)  
Pin : SPHD-002T-P0.5(J.S.T.)  
Weight : 10g max

●External view

●Wiring diagram

●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1061	28	red	500
2	-	-	-	-
3	-	-	-	-
4	UL1061	28	black	500
5	UL1061	28	green	500
6	-	-	-	-
7	UL1061	28	yellow	500
8	UL1061	28	gray	500

●Model number  
**H-SN-75**

Housing : PDHR-14VS(J.S.T.)  
Pin : SPHD-002T-P0.5(J.S.T.)  
Weight : 20g max

●External view

●Wiring diagram

●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1061	24	white	500
2	UL1061	28	gray	500
3	UL1061	24	orange	500
4	-	-	-	-
5	-	-	-	-
6	-	-	-	-
7	UL1061	28	purple	500
8	-	-	-	-
9	UL1061	28	red	500
10	UL1061	28	black	500
11	UL1061	28	pink	500
12	UL1061	28	gray	500
13	UL1061	28	orange	500
14	UL1061	28	blue	500

●Model number  
**H-PA-18**

Housing : PDHR-08VS(J.S.T.)  
Pin : SPHD-002T-P0.5(J.S.T.)  
Weight : 7g max

●External view

●Wiring diagram

●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	-	-	-	-
2	-	-	-	-
3	-	-	-	-
4	-	-	-	-
5	UL1061	28	green	180
6	-	-	-	-
7	UL1061	28	yellow	180
8	UL1061	28	gray	180