

TABLE OF LENGTH TOLERANCES [mm]

Over	Up to and Including	Tolerance
0	1000	±20
1000	3000	±30
3000	5000	±40
5000	10000	±50
10000	15000	±100
15000	20000	±150
20000		±L/100

INSERT ORIENTATION

Housing 2 Poles + 2 Earths	Housing 3 Poles + 1 Earth
Earth H6/H12 E452XXXXXX1XXXX	Earth H12 E452XXXXXX2XXXX PIN 3 Not Used
Earth H3/H9 E452XXXXXX4XXXX	Earth H3 E452XXXXXX3XXXX PIN 3 Not Used
Earth H6/H12 E452XXXXXX1XC3X E452XXXXXX1XC7X E452XXXXXX1XR0X E452XXXXXX1XR2X	Earth H6 E452XXXXXX6XXXX PIN 3 Not Used
Insert rotated 180°	Earth H9 E452XXXXXX9XXXX PIN 3 Not Used

Type of Screws and Gaskets

Profiled Gasket	Flat Gasket	Integrated Gasket	Screw M3x25
<p>(□ 29.5)</p> <p>(5.2)</p> <p>(1.8)</p>	<p>(□ 28)</p> <p>(1.8)</p>	<p>(□ 28)</p> <p>(1.8)</p> <p>(9.3)</p>	<p>(25)</p> <p>M3</p>
			Screw M3x27 + Washer <p>(27)</p> <p>M3</p> <p>NBR Washer</p>

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SYMBOLS	DIMENSION UNITS	SCALE	CURRENT REV DESC:		
	mm	1:1			
GENERAL TOLERANCES (UNLESS SPECIFIED)			molex STANDARD E452 DIN FORM A EN 175301-803		
ANGULAR TOL ± °					
▽ = 0	4 PLACES ±		EC NO: 603741	2018/07/13	
▽ = 0	3 PLACES ±		DRWN: APAWLAK01	2018/08/31	
▽ = 0	2 PLACES ±		CHK'D: RSILLER	2018/08/31	
▽ = 0	1 PLACE ±		APPR: RSILLER	2018/08/31	
□ = 0	0 PLACES ±		INITIAL REVISION:		
■ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRWN: APAWLAK01	2018/07/13	
▽ = 0	THIRD ANGLE PROJECTION		APPR: RSILLER	2018/08/31	
DRAWING			SERIES	MATERIAL NUMBER	CUSTOMER
A3-SIZE			121050	SEE 1210502000_PDP	GENERAL MARKET
DOCUMENT NUMBER			DOC TYPE	DOC PART	REVISION
1210502000			PSD	000	A
DOCUMENT STATUS			SHEET NUMBER		
P1 RELEASE DATE 2018/08/31 12:24:53			1 OF 3		

PN KEY ENGINEERING PN

E 4 5 2 X X X X X X X X X X X

E - Packing without bag
W - Single Packing

Number of wires:
2 - 2 Wires + Earth

Cable type:
See Table

Head Colour:
G - Grey
N - Black
A - CSA-UL Black
B - CSA-UL Grey

Cable Length in[cm]
050 = 50cm
300 = 300cm
10K = 1000cm

Wiring Configuration:
See sheet 3

Voltage and Led Colour

Red Led:	Green Led:	Yellow Led:
1 = 12V	A = 12V	G = 12V
2 = 24V	B = 24V	H = 24V
3 = 48V	C = 48V	K = 48V
4 = 115V	D = 115V	L = 115V
5 = 230V	E = 230V	M = 230V

Earth PIN location (see insert orientation table):
1 = Double Earth on H6 & H12
2 = Earth on H12
3 = Earth on H3
4 = Double Earth on H3 & H9
6 = Earth on H6
9 = Earth on H9

Type of Gasket and Screw (see sheet 1):
1 = NBR Profile Gasket + Fixing Screw M3x25mm
2 = NBR Flat Gasket + Fixing Screw M3x25mm
3 = Silicone Profile Gasket + Fixing Screw M3x25mm
4 = Silicone Flat Gasket + Fixing Screw M3x25mm
P = NBR Integrated Gasket + Fixing Screw with Washer M3x27mm Assembled on Connector
R = NBR Integrated Gasket + Fixing Screw with Washer M3x27mm NOT Assembled on Connector
T = NBR Profile Gasket + Fixing Screw with Washer M3x27mm

CABLE TYPE	NO. OF WIRES	CROSS SECTION	CABLE O.D.	CABLE JACKET	UL	CSA	STATIC: TEMP. / BENDING RADIUS	DYNAMIC: TEMP. / BENDING RADIUS	SHIELD
A2	3	AWG 20	5.6mm±0.2	PVC BLACK	UL 2661	CSA C22.2	-30°C to +105°C, 10xO.D.	-5°C to +105°C, 15xO.D.	-
A3	3	AWG 18	6.5mm±0.25	PVC BLACK	UL 2661	CSA C22.2	-30°C to +105°C, 10xO.D.	-5°C to +105°C, 15xO.D.	-
B2	3	AWG 20	5.6mm±0.2	PUR BLACK	UL 20668	CSA C22.2	-40°C to +90°C, 5xO.D.	-25°C to +90°C, 10xO.D.	-
B3	3	AWG 18	6.5mm±0.2	PUR BLACK	UL 20668	CSA C22.2	-40°C to +90°C, 5xO.D.	-25°C to +90°C, 10xO.D.	-
F4	3	1mm ²	7.1mm+0.2	PVC GREY	-	-	-15°C to +70°C, 10xO.D.	-5°C to +60°C, 15xO.D.	-
I0	3	1mm ²	7.6mm±0.2	PVC GREY	-	-	-25°C to +70°C, 10xO.D.	-5°C to +70°C, 15xO.D.	YES
I2	3	0.5mm ²	5.5mm+0.3	PVC GREY	-	-	-25°C to +70°C, 10xO.D.	-5°C to +70°C, 15xO.D.	-
I3	3	0.75mm ²	6.0mm±0.2	PVC GREY	-	-	-25°C to +70°C, 10xO.D.	-5°C to +70°C, 15xO.D.	-
I4	3	1mm ²	7.1mm+0.2	PVC GREY	-	-	-25°C to +70°C, 10xO.D.	-5°C to +70°C, 15xO.D.	-
N2	3	0.5mm ²	5.6mm±0.7	PVC BLACK	-	-	-20°C to +70°C, 3xO.D.	-15°C to +70°C, 5xO.D.	-
N3	3	0.75mm ²	6.8mm±0.8	PVC BLACK	-	-	-20°C to +70°C, 3xO.D.	-15°C to +70°C, 5xO.D.	-
N4	3	1mm ²	7.15mm±0.85	PVC BLACK	-	-	-20°C to +70°C, 3xO.D.	-15°C to +70°C, 5xO.D.	-
P1	3	0.34mm ²	5.3mm±0.2	PUR BLACK	-	-	-25°C to +80°C, 10xO.D.	-5°C to +80°C, 15xO.D.	-
P2	3	0.5mm ²	5.5mm+0.3	PUR BLACK	-	-	-40°C to +90°C, 7.5xO.D.	-15°C to +90°C, 12.5xO.D.	-
P3	3	0.75mm ²	6.5mm±0.2	PUR BLACK	-	-	-40°C to +90°C, 7.5xO.D.	-15°C to +90°C, 12.5xO.D.	-
R4	3	1mm ²	7.1mm±0.2	TPR HF BLACK	-	-	-	-	-
Y3	3	0.75mm ²	6.5mm±0.2	SILICONE RED	-	-	-60°C to +180°C, 15xO.D.	-	-

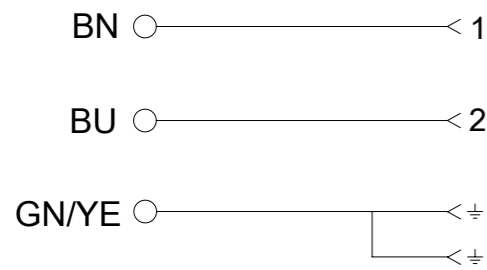
Notes:

- Please see excel sheet 1210502000_PDP for currently configured part numbers.
- Drawing is a replacement for: SD-121050-001

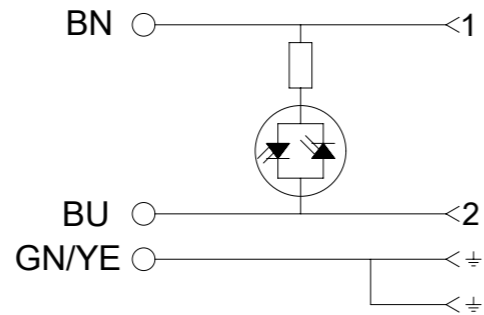
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	▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)							
	▽ = 0	ANGULAR TOL	±	'					
▽ = 0	4 PLACES	±			EC NO: 603741				
▽ = 0	3 PLACES	±			DRWN: APAWLAK01 2018/07/13				
▽ = 0	2 PLACES	±			CHK'D: RSILLER 2018/08/31				
▽ = 0	1 PLACE	±			APPR: RSILLER 2018/08/31				
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□ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
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						SEE 1210502000_PDP	GENERAL MARKET		2 OF 3

WIRING DIAGRAMS

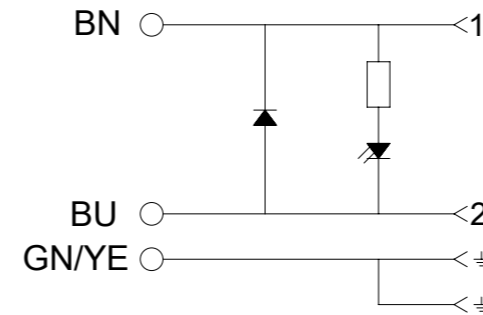
ELECTRICAL DIAGRAM 00



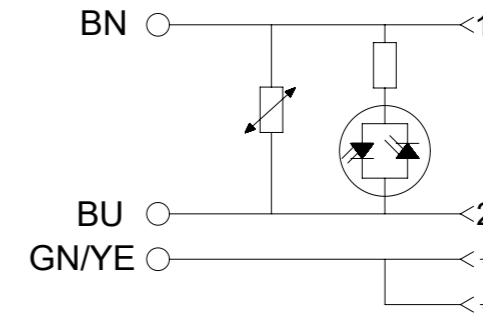
ELECTRICAL DIAGRAM A1



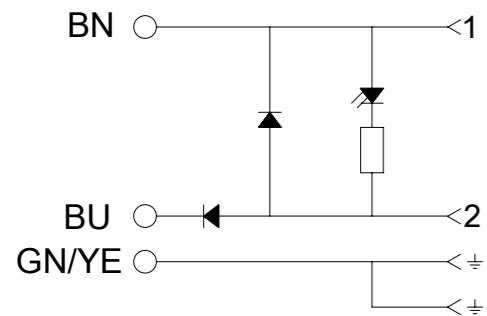
ELECTRICAL DIAGRAM C3



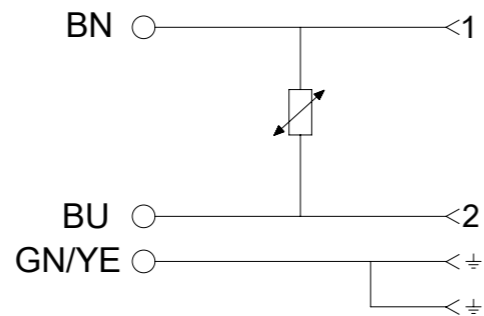
ELECTRICAL DIAGRAM C4



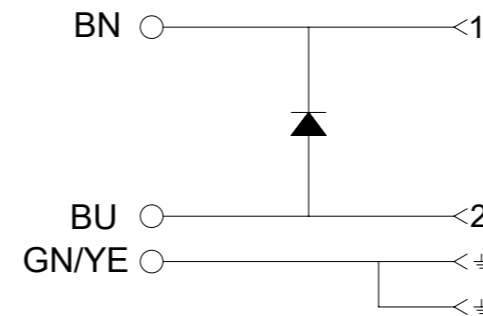
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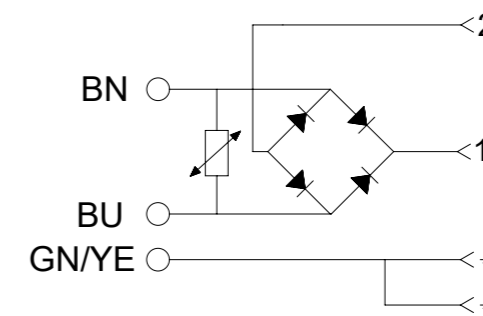
ELECTRICAL DIAGRAM D0



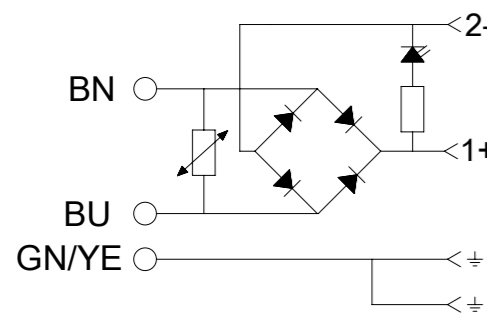
ELECTRICAL DIAGRAM E0



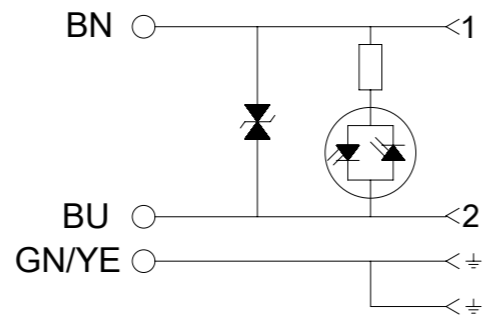
ELECTRICAL DIAGRAM R0



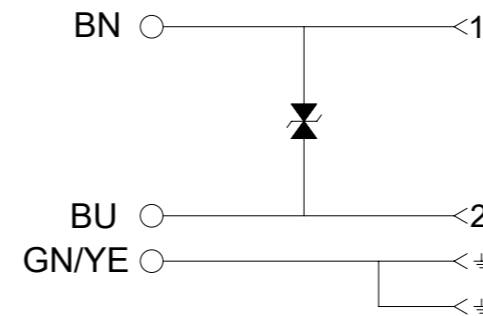
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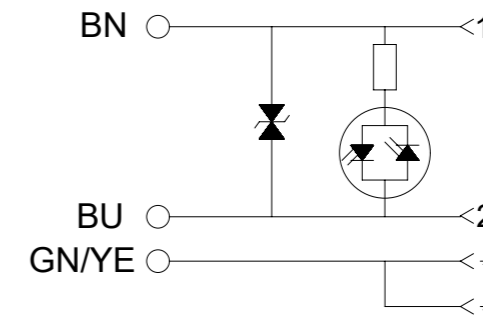
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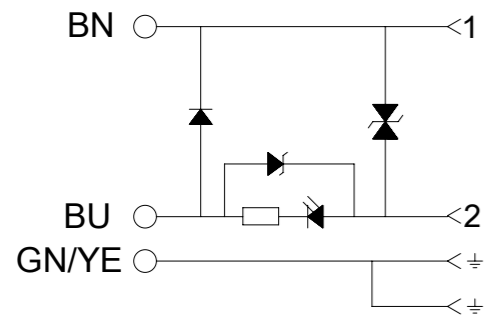
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ELECTRICAL DIAGRAM S3



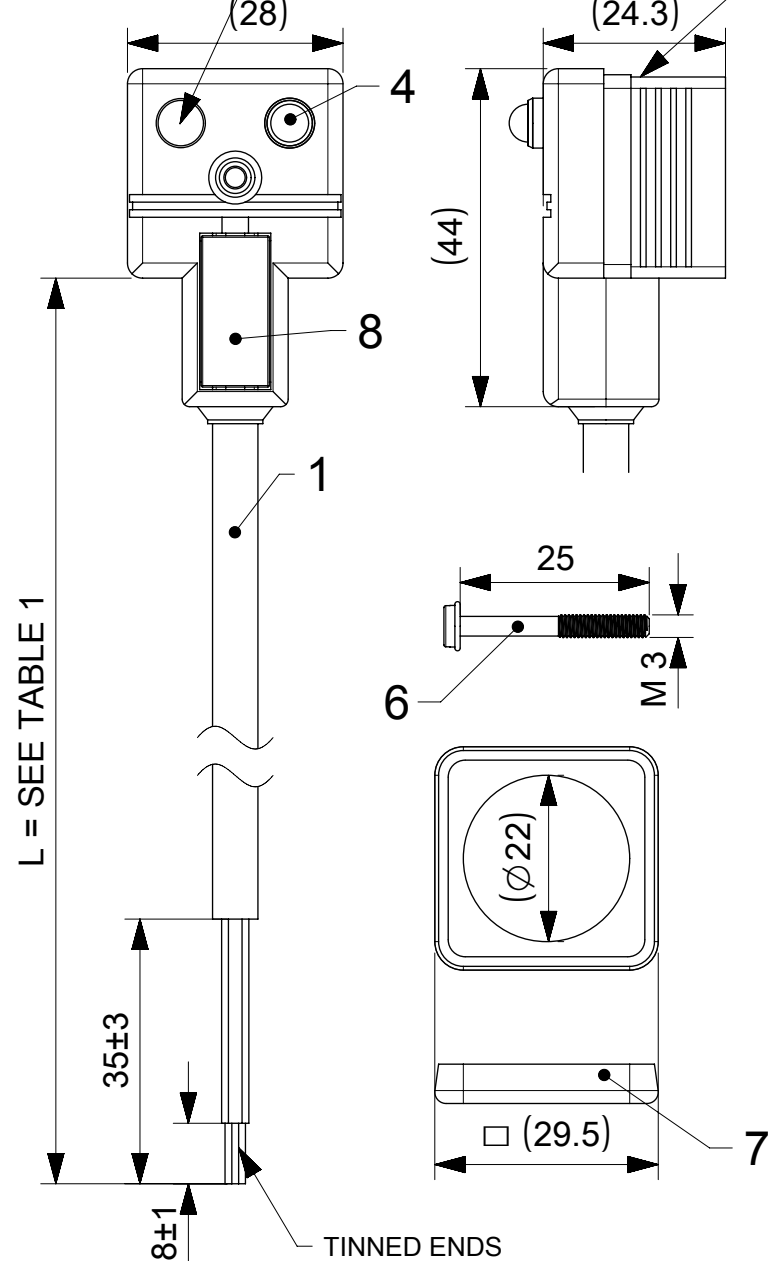
ELECTRICAL DIAGRAM NS



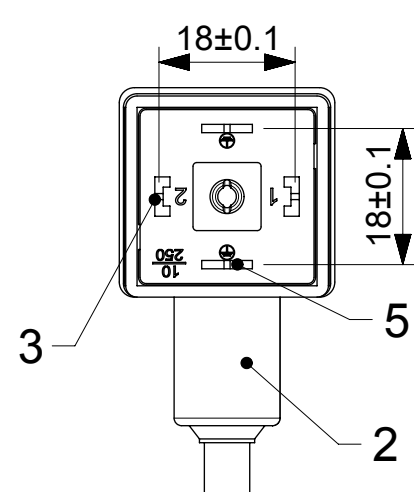
Technical Spec:
 Supply Voltage: See PN KEY
 Max. current: 5A; A1-C4-S0
 1,5A; R2
 Contact Resistance: ≤15milliohms max.
 Operating Temperature:
 with NBR Gasket: -40°C +90°C
 with Silicone: -40°C +125°C

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SYMBOLS	DIMENSION UNITS	SCALE	CURRENT REV DESC:						
	mm	1:1	EC NO: 603741 DRWN: APAWLAK01 2018/07/13 CHK'D: RSILLER 2018/08/31 APPR: RSILLER 2018/08/31						
GENERAL TOLERANCES (UNLESS SPECIFIED)									
▽ = 0	ANGULAR TOL	± °	INITIAL REVISION: DRWN: APAWLAK01 2018/07/13 APPR: RSILLER 2018/08/31						
▽ = 0	4 PLACES	±							
▽ = 0	3 PLACES	±	DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION	STANDARD E452 DIN FORM A EN 175301-803 PRODUCT CUSTOMER DRAWING	
▽ = 0	2 PLACES	±	1210502000		PSD	000	A		
▽ = 0	1 PLACE	±	MATERIAL NUMBER		CUSTOMER		SHEET NUMBER		
▽ = 0	0 PLACES	±	SEE 1210502000_PDP		GENERAL MARKET		3 OF 3		
☒ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	CUSTOMER		SHEET NUMBER	
▽ = 0				A3-SIZE	121050	GENERAL MARKET		3 OF 3	

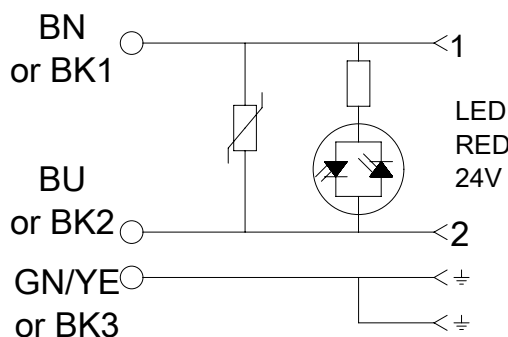
OVERMOULDED WITHOUT LOGO



CIRCUIT PRINTOUT C4 24V/WHITE



ELECTRICAL DIAGRAM C4



CHANGES SEE REVISION MARKING A1	NEW PNs ADDED
REVISION MARKING A2	PNs REMOVED

TABLE 1

MOLEX PN	ENGINEERING PN	CABLE	LENGTH
1210503614	E452I3N30011C426B	I3	3000±30
1210503616	E452I3N70011C426B	I3	7000±50
1210503617	E452I3N50011C426B	I3	5000±40
1210503620	E452I3N40011C426B	I3	4000±40
1210503621	E452I3N60011C426B	I3	6000±50

A1

BILL OF MATERIALS

ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH
8	1	LABEL WHITE	ABS	-
7	1	GASKET	NBR	-
6	1	SCREW	STEEL	ZINC
5	4	CONTACT	BRASS	SILVER
4	1	PCB C4 24V RED LED	-	-
3	1	INSERT FOR DIN A BLACK	PA66+25%G V0	-
2	-	MOULDING MATERIAL BLACK	PP	-
1	-	CABLE	(SEE CATALOG)	-

NOTES:
1. SCREW AND GASKET NOT ASSEMBLED PACKED SEPARATELY.

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QUALITY SYMBOLS	EC NO: 115496 DRWN: APAWLAK01 CHK'D: MIWASIECZKO APPR: MIWASIECZKO	2017/04/05 2017/04/10	GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 4 PLACES ± 3 PLACES ± 2 PLACES ± 1 PLACE ± 0 PLACES ± DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DIMENSION UNITS: MM SCALE: 1:1 DRWN BY: APAWLAK01 DATE: 2016/10/06 CHK'D BY: DATE: APPR BY: MIWASIECZKO DATE: 2016/10/19 DRAWING SIZE: A4 THIRD ANGLE PROJECTION	
			CAB452N 3X0.75X3000CEI W/O LOGO		
			PRODUCT CUSTOMER DRAWING		
		SERIES: 121050	MATERIAL NUMBER: SEE TABLE	CUSTOMER: GENERAL MARKET	
		DOCUMENT NUMBER: 1210503614	DOC TYPE: PSD	DOC PART: 00P	
				SHEET NUMBER: 1 OF 1	