



# PN KEY ENGINEERING PN

**E 4 5 2 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	1mm²	7.1mm+0.2	PVC GREY	-	-	-15°C to +70°C, 10xO.D.	-5°C to +60°C, 15xO.D.	-
I0	3	1mm²	7.6mm±0.2	PVC GREY	-	-	-25°C to +70°C, 10xO.D.	-5°C to +70°C, 15xO.D.	YES
I2	3	0.5mm²	5.5mm+0.3	PVC GREY	-	-	-25°C to +70°C, 10xO.D.	-5°C to +70°C, 15xO.D.	-
I3	3	0.75mm²	6.0mm±0.2	PVC GREY	-	-	-25°C to +70°C, 10xO.D.	-5°C to +70°C, 15xO.D.	-
I4	3	1mm²	7.1mm+0.2	PVC GREY	-	-	-25°C to +70°C, 10xO.D.	-5°C to +70°C, 15xO.D.	-
N2	3	0.5mm²	5.6mm±0.7	PVC BLACK	-	-	-20°C to +70°C, 3xO.D.	-15°C to +70°C, 5xO.D.	-
N3	3	0.75mm²	6.8mm±0.8	PVC BLACK	-	-	-20°C to +70°C, 3xO.D.	-15°C to +70°C, 5xO.D.	-
N4	3	1mm²	7.15mm±0.85	PVC BLACK	-	-	-20°C to +70°C, 3xO.D.	-15°C to +70°C, 5xO.D.	-
P1	3	0.34mm²	5.3mm±0.2	PUR BLACK	-	-	-25°C to +80°C, 10xO.D.	-5°C to +80°C, 15xO.D.	-
P2	3	0.5mm²	5.5mm+0.3	PUR BLACK	-	-	-40°C to +90°C, 7.5xO.D.	-15°C to +90°C, 12.5xO.D.	-
P3	3	0.75mm²	6.5mm±0.2	PUR BLACK	-	-	-40°C to +90°C, 7.5xO.D.	-15°C to +90°C, 12.5xO.D.	-
R4	3	1mm²	7.1mm±0.2	TPR HF BLACK	-	-	-	-	-
Y3	3	0.75mm²	6.5mm±0.2	SILICONE RED	-	-	-60°C to +180°C, 15xO.D.	-	-

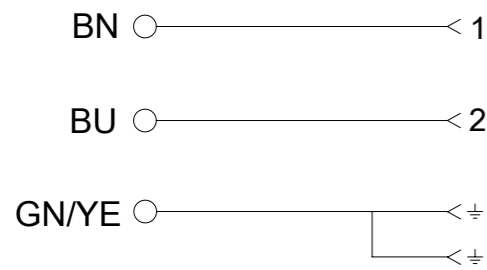
## Notes:

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

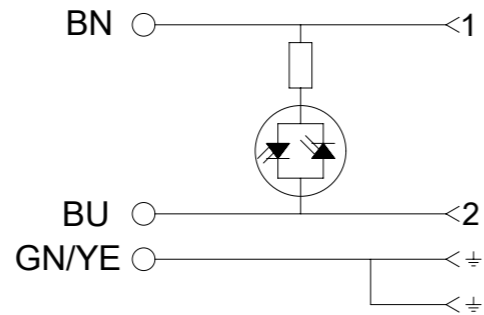
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	▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)							
	▽ = 0	ANGULAR TOL	±	'					
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▽ = 0	3 PLACES	±			DRWN: APAWLAK01 2018/07/13				
▽ = 0	2 PLACES	±			CHK'D: RSILLER 2018/08/31				
▽ = 0	1 PLACE	±			APPR: RSILLER 2018/08/31				
▽ = 0	0 PLACES	±			INITIAL REVISION:				
□ = 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

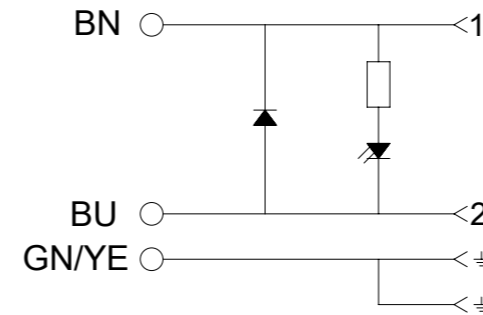
ELECTRICAL DIAGRAM 00



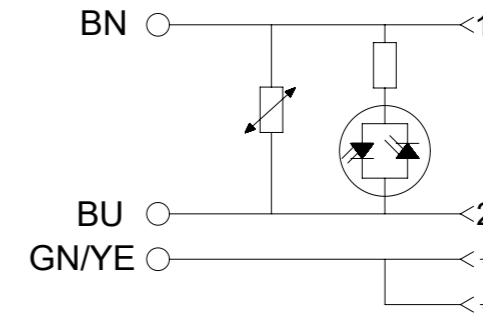
ELECTRICAL DIAGRAM A1



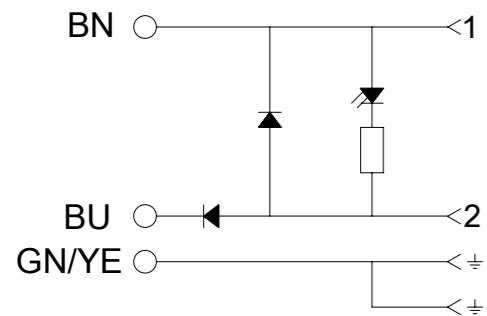
ELECTRICAL DIAGRAM C3



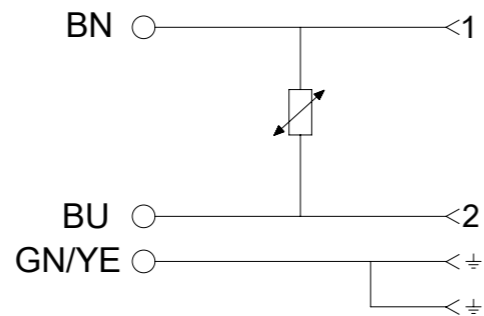
ELECTRICAL DIAGRAM C4



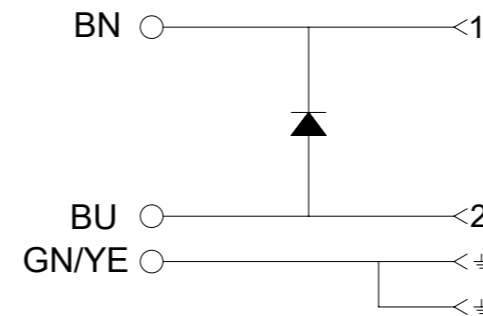
ELECTRICAL DIAGRAM C7



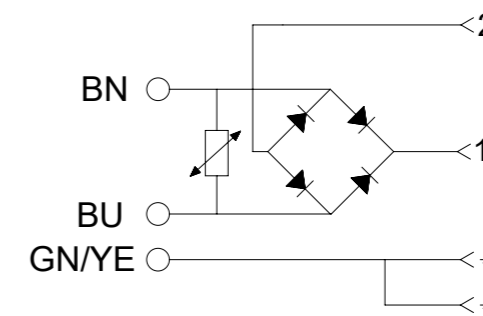
ELECTRICAL DIAGRAM D0



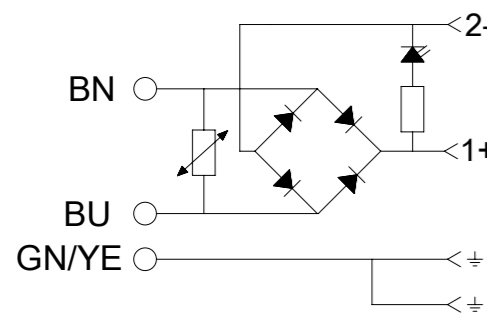
ELECTRICAL DIAGRAM E0



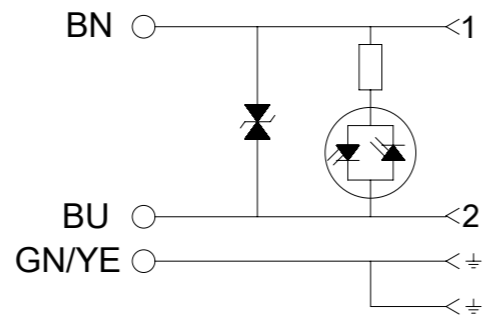
ELECTRICAL DIAGRAM R0



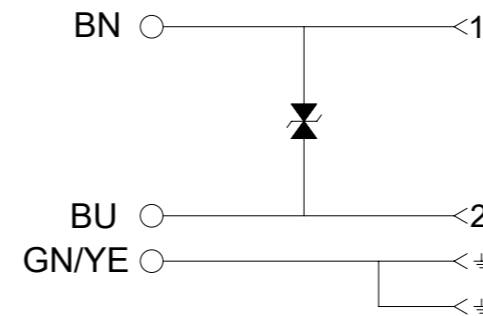
ELECTRICAL DIAGRAM R2



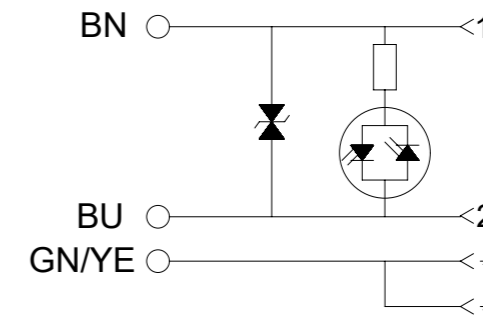
ELECTRICAL DIAGRAM S0



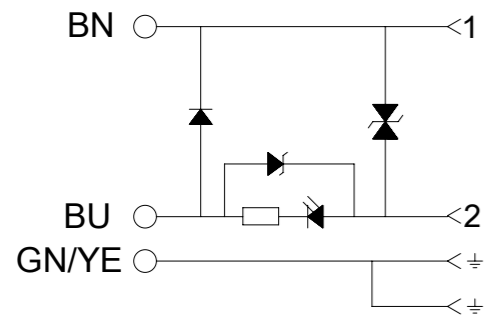
ELECTRICAL DIAGRAM S1



ELECTRICAL DIAGRAM S3



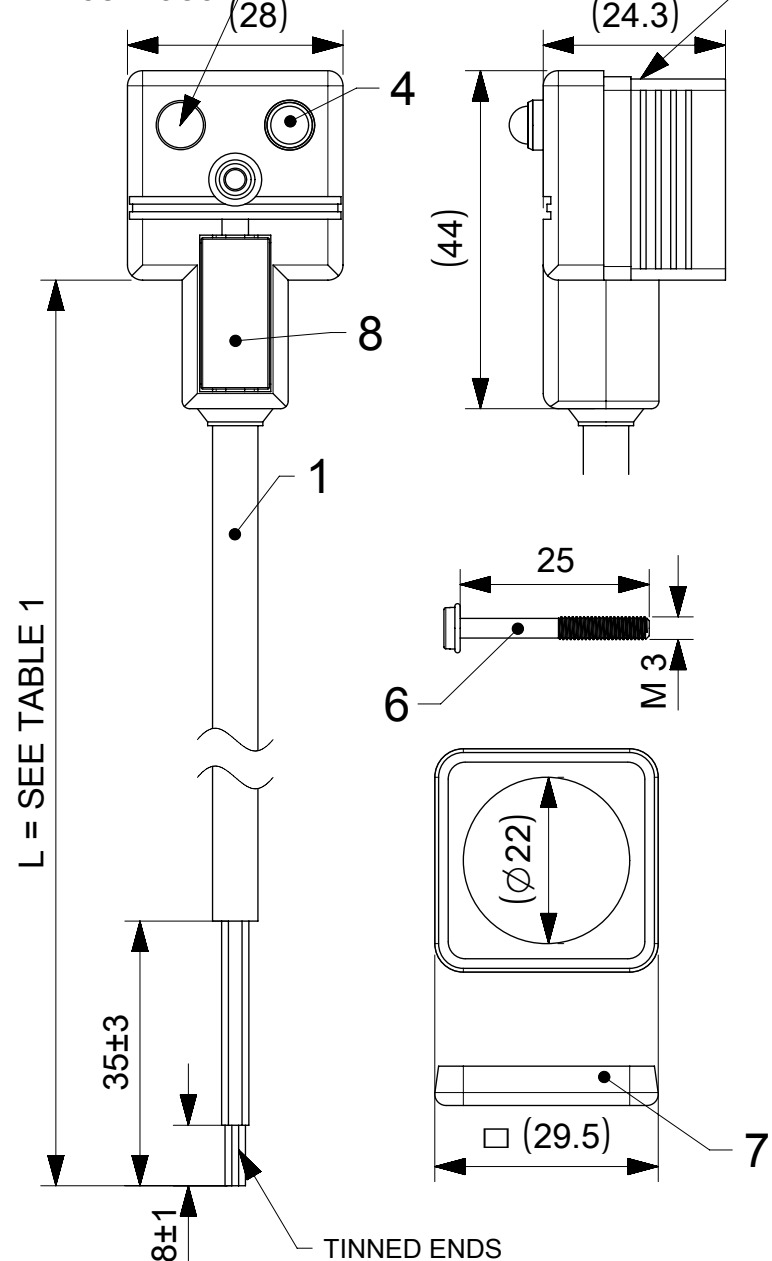
ELECTRICAL DIAGRAM NS



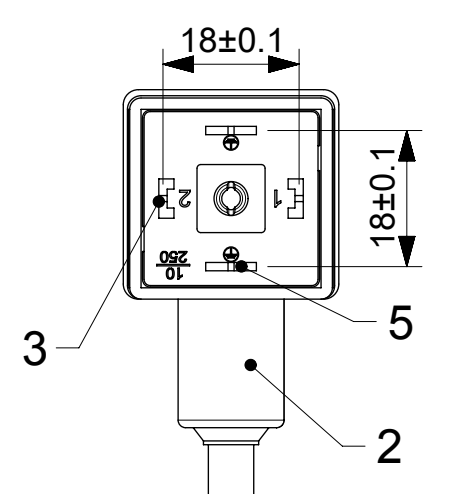
Technical Spec:  
 Supply Voltage: See PN KEY  
 Max. current: 5A; A1-C4-S0  
 1,5A; R2  
 Contact Resistance: ≤15milliohms max.  
 Operating Temperature:  
 with NBR Gasket: -40°C +90°C  
 with Silicone: -40°C +125°C

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										
SYMBOLS	DIMENSION UNITS	SCALE	CURRENT REV DESC:							
	mm	1:1	EC NO: 603741 DRWN: APWLAK01 2018/07/13 CHK'D: RSILLER 2018/08/31 APPR: RSILLER 2018/08/31							
GENERAL TOLERANCES (UNLESS SPECIFIED)										STANDARD E452 DIN FORM A EN 175301-803
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▽ = 0	4 PLACES	±	INITIAL REVISION:				DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
▽ = 0	3 PLACES	±	DRWN: APWLAK01 2018/07/13				1210502000	PSD	000	A
▽ = 0	2 PLACES	±	APPR: RSILLER 2018/08/31							
▽ = 0	1 PLACE	±	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS							
▽ = 0	0 PLACES	±	THIRD ANGLE PROJECTION							
■ = 0			DRAWING		SERIES	MATERIAL NUMBER		CUSTOMER		SHEET NUMBER
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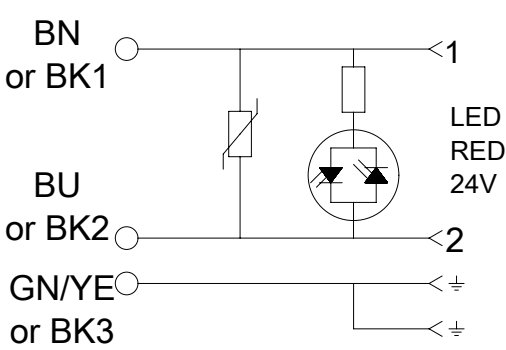
OVERMOULDED WITHOUT LOGO



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)	-

L = SEE TABLE 1

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

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QUALITY SYMBOLS	2017/04/05	2017/04/10	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION UNITS	SCALE	
▽ = 0	EC NO: 115496 DRWN: APAWLAK01 CHK'D: MIWASIECZKO APPR: MIWASIECZKO	REV: A2	4 PLACES ±	MM	1:1	
▽ = 0			3 PLACES ±	DRWN BY: APAWLAK01	DATE: 2016/10/06	
▽ = 0			2 PLACES ±	CHK'D BY:	DATE:	
▽ = 0			1 PLACE ±	APPR BY: MIWASIECZKO	DATE: 2016/10/19	
▽ = 0	0 PLACES ±	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRAWING SIZE: A4	THIRD ANGLE PROJECTION	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