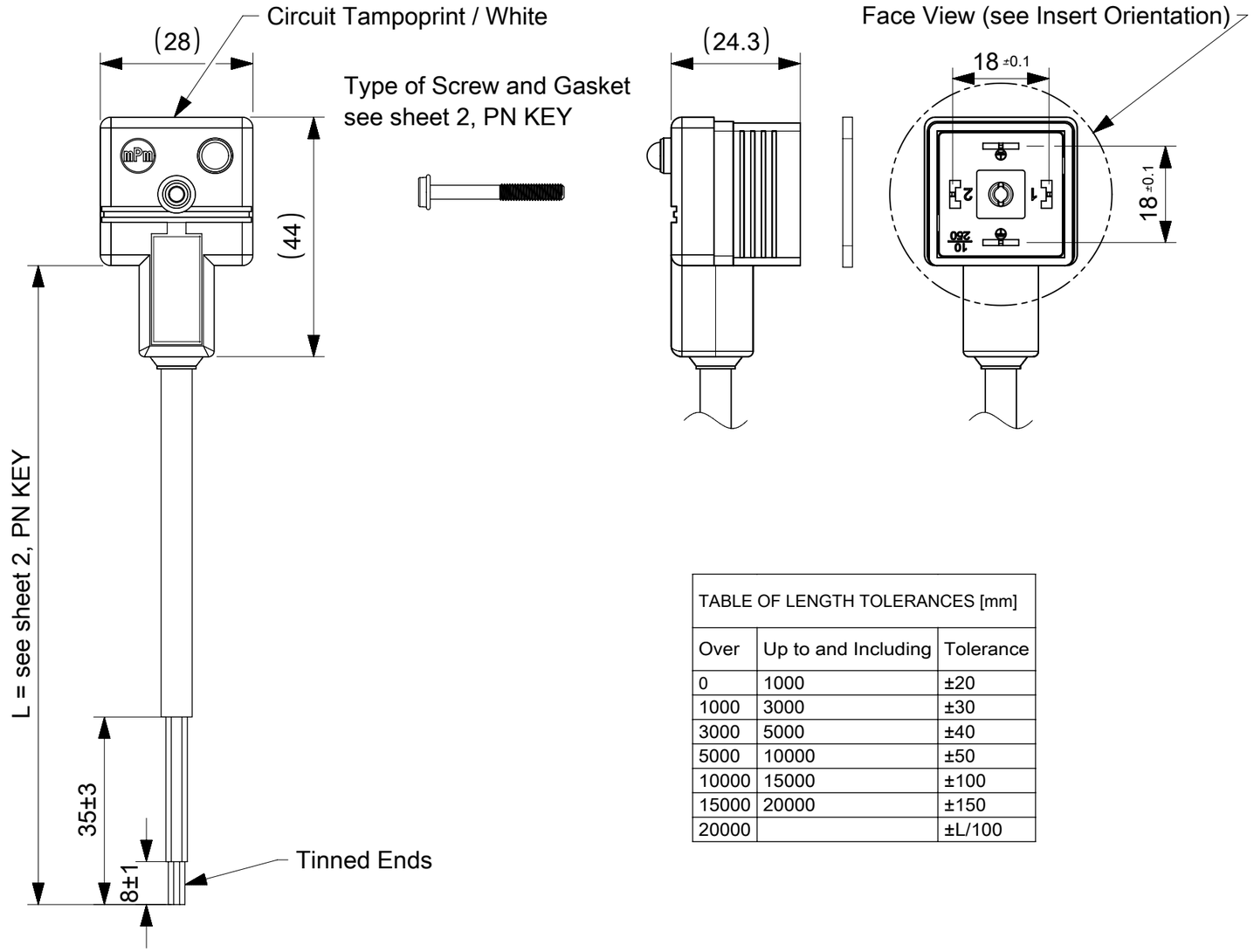
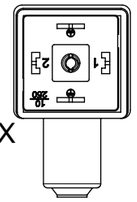
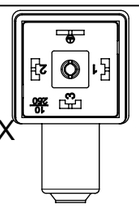
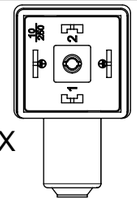
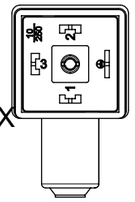
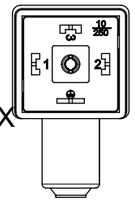
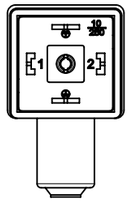
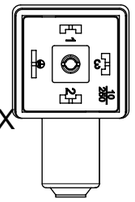
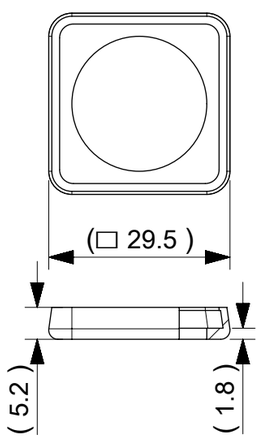
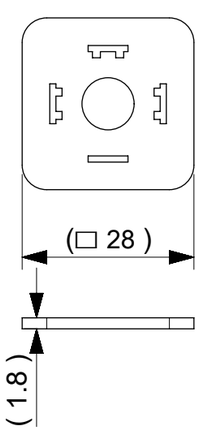
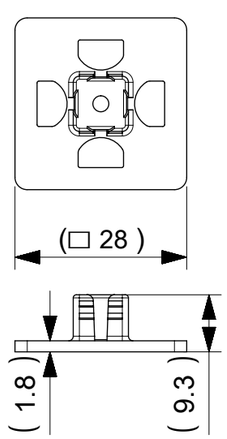
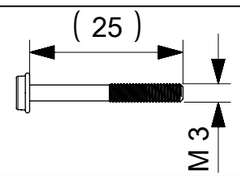
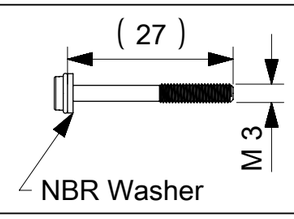


TABLE OF LENGTH TOLERANCES [mm]		
Over	Up to and Including	Tolerance
0	1000	±20
1000	3000	±30
3000	5000	±40
5000	10000	±50
10000	15000	±100
15000	20000	±150
20000		±L/100

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
			
			Screw M3x27 + Washer
			

DOCUMENT STATUS	P1	RELEASE DATE	2018/08/31 12:24:53

FORMAT: molex_B_mm_A3
REVISION: H
DATE: 2018/01/16

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SYMBOLS: E = 0; E = 0; E = 0; S = 0; ▼ = 0; V = 0; ☒ = 0; ■ = 0; ▽ = 0

DIMENSION UNITS: mm
SCALE: 1:1
GENERAL TOLERANCES (UNLESS SPECIFIED)
ANGULAR TOL ± °
4 PLACES ±
3 PLACES ±
2 PLACES ±
1 PLACE ±
0 PLACES ±
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC:

EC NO: 603741
DRWN: APAWLAK01 2018/07/13
CHK'D: RSILLER 2018/08/31
APPR: RSILLER 2018/08/31

INITIAL REVISION:
DRWN: APAWLAK01 2018/07/13
APPR: RSILLER 2018/08/31

THIRD ANGLE PROJECTION
DRAWING: A3-SIZE
SERIES: 121050

molex

STANDARD E452 DIN FORM A EN 175301-803

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1210502000	PSD	000	A

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE 1210502000_PDP	GENERAL MARKET	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	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:
1. Please see excel sheet 1210502000_PDP for currently configured part numbers.
2. Drawing is a replacement for: SD-121050-001

DOCUMENT STATUS	P1	RELEASE DATE	2018/08/31 12:24:53

FORMAT: master-Sheet-A3
REVISION: H
DATE: 2018/01/10

SYMBOLS: E = 0, E = 0, E = 0, S = 0, ▼ = 0, C = 0, ☒ = 0, ■ = 0, ▽ = 0

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DIMENSION UNITS	SCALE
mm	1:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL	± °
4 PLACES	±
3 PLACES	±
2 PLACES	±
1 PLACE	±
0 PLACES	±

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC:

EC NO: 603741
DRWN: APAWLAK01 2018/07/13
CHK'D: RSILLER 2018/08/31
APPR: RSILLER 2018/08/31

INITIAL REVISION:
DRWN: APAWLAK01 2018/07/13
APPR: RSILLER 2018/08/31

THIRD ANGLE PROJECTION | DRAWING: A3-SIZE | SERIES: 121050

molex

STANDARD E452 DIN FORM A EN 175301-803

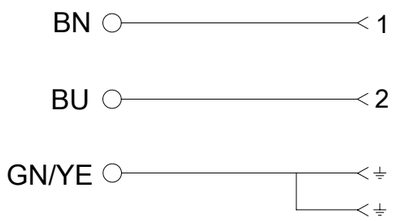
PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1210502000	PSD	000	A

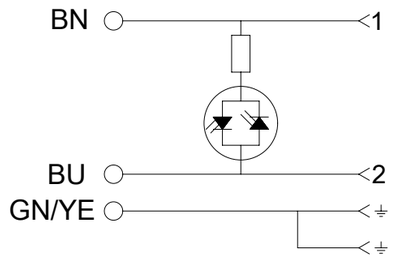
MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE 1210502000_PDP	GENERAL MARKET	2 OF 3

WIRING DIAGRAMS

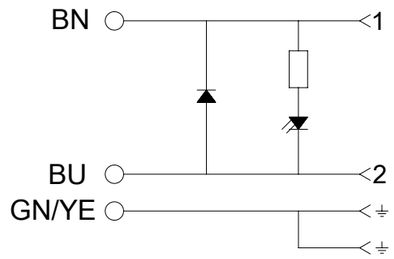
ELECTRICAL DIAGRAM 00



ELECTRICAL DIAGRAM A1



ELECTRICAL DIAGRAM C3



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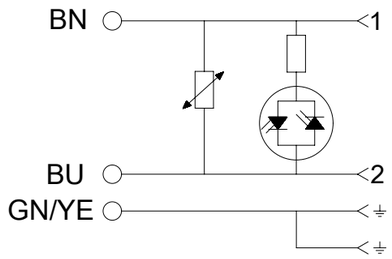
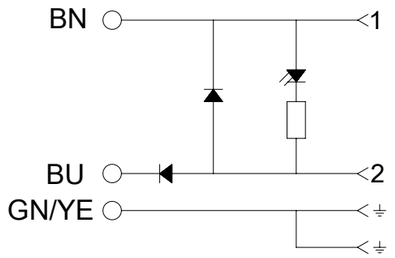


ELECTRICAL DIAGRAM C7



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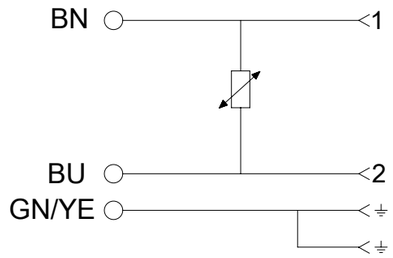

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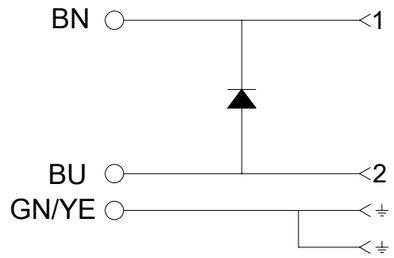

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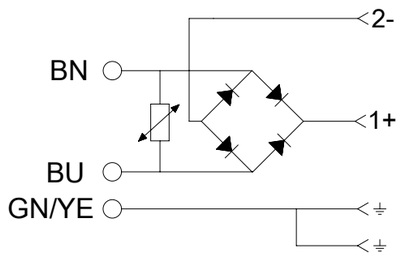

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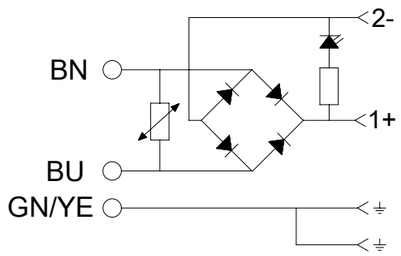
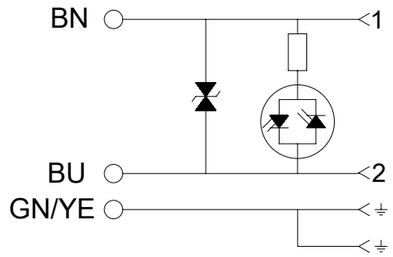
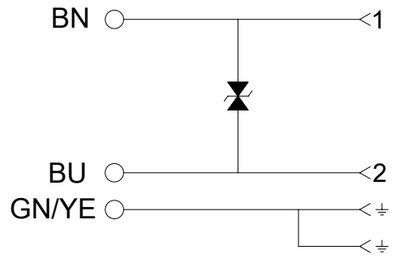


ELECTRICAL DIAGRAM S0



ELECTRICAL DIAGRAM S1



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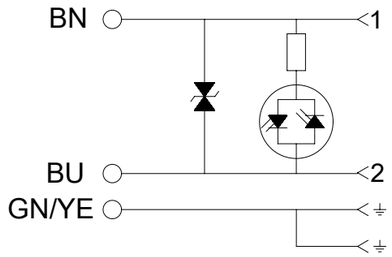
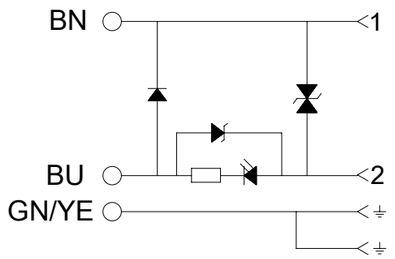


ELECTRICAL DIAGRAM NS



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

SYMBOLS	
EA	= 0
EC	= 0
EE	= 0
S	= 0
▼	= 0
C	= 0
☒	= 0
■	= 0
▽	= 0

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DIMENSION UNITS	SCALE
mm	1:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL	±	°
4 PLACES	±	
3 PLACES	±	
2 PLACES	±	
1 PLACE	±	
0 PLACES	±	

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

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CHK'D: RSILLER 2018/08/31
APPR: RSILLER 2018/08/31

INITIAL REVISION:
DRWN: APAWLAK01 2018/07/13
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STANDARD E452 DIN FORM A EN 175301-803

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1210502000	PSD	000	A

THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
	A3-SIZE	121050	SEE 1210502000_PDP	GENERAL MARKET	3 OF 3

DOCUMENT STATUS	P1	RELEASE DATE	2018/08/31 12:24:53

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REVISION: H
DATE: 2018/01/18