

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

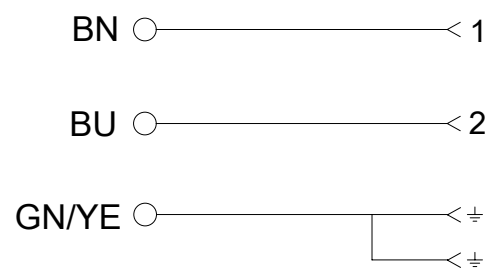
Earth PIN location (see insert orientation table):
1 = Double Earth on H6 & H12
2 = Earth on H12
3 = Earth on H3
4 = Double Earth on H3 & H9
6 = Earth on H6
9 = Earth on H9

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

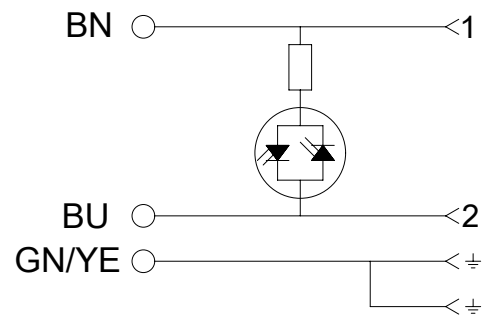
CABLE TYPE	NO. OF WIRES	CROSS SECTION	CABLE O.D.	CABLE JACKET	UL	CSA	STATIC: TEMP. / BENDING RADIUS	DYNAMIC: TEMP. / BENDING RADIUS	SHIELD
A2	3	AWG 20	5.6mm±0.2	PVC BLACK	UL 2661	CSA C22.2	-30°C to +105°C, 10xO.D.	-5°C to +105°C, 15xO.D.	-
A3	3	AWG 18	6.5mm±0.25	PVC BLACK	UL 2661	CSA C22.2	-30°C to +105°C, 10xO.D.	-5°C to +105°C, 15xO.D.	-
B2									

WIRING DIAGRAMS

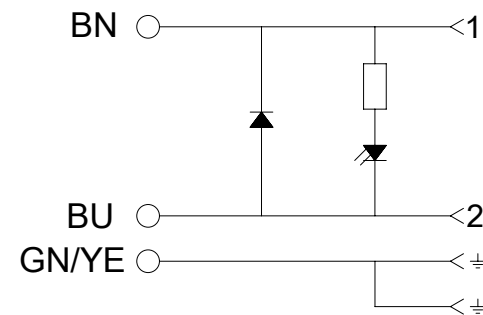
ELECTRICAL DIAGRAM 00



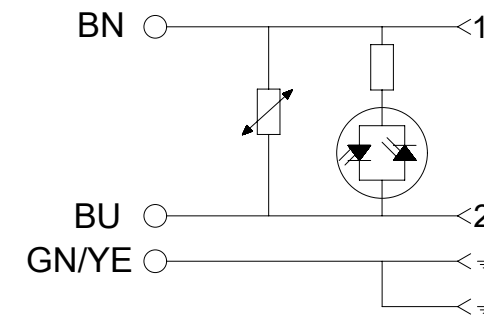
ELECTRICAL DIAGRAM A1



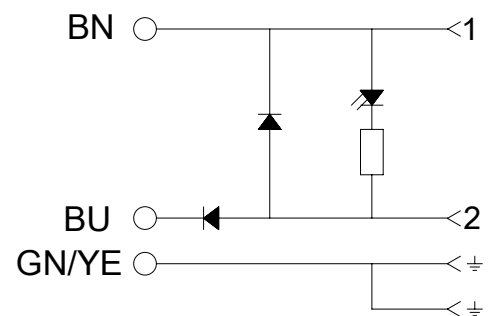
ELECTRICAL DIAGRAM C3



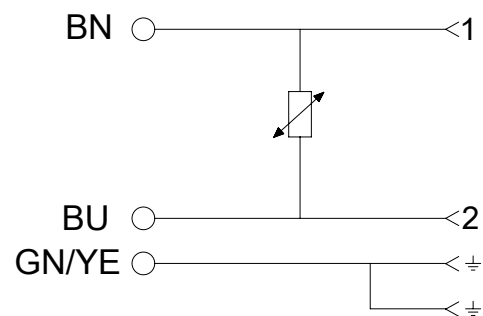
ELECTRICAL DIAGRAM C4



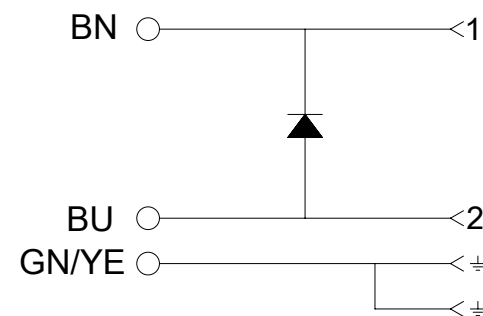
ELECTRICAL DIAGRAM C7



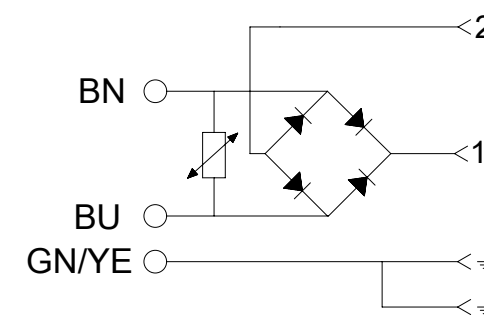
ELECTRICAL DIAGRAM D0



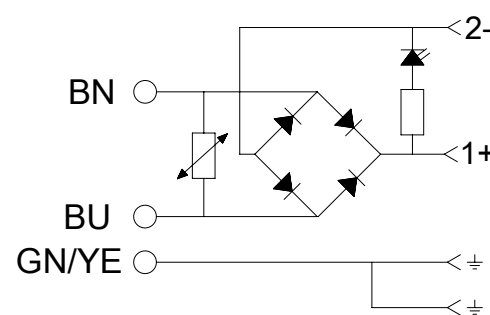
ELECTRICAL DIAGRAM E0



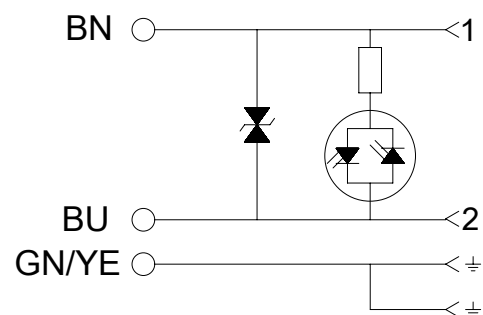
ELECTRICAL DIAGRAM R0



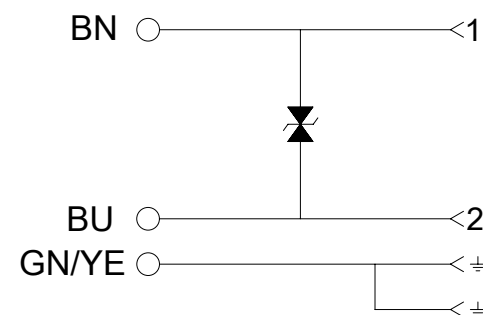
ELECTRICAL DIAGRAM R2

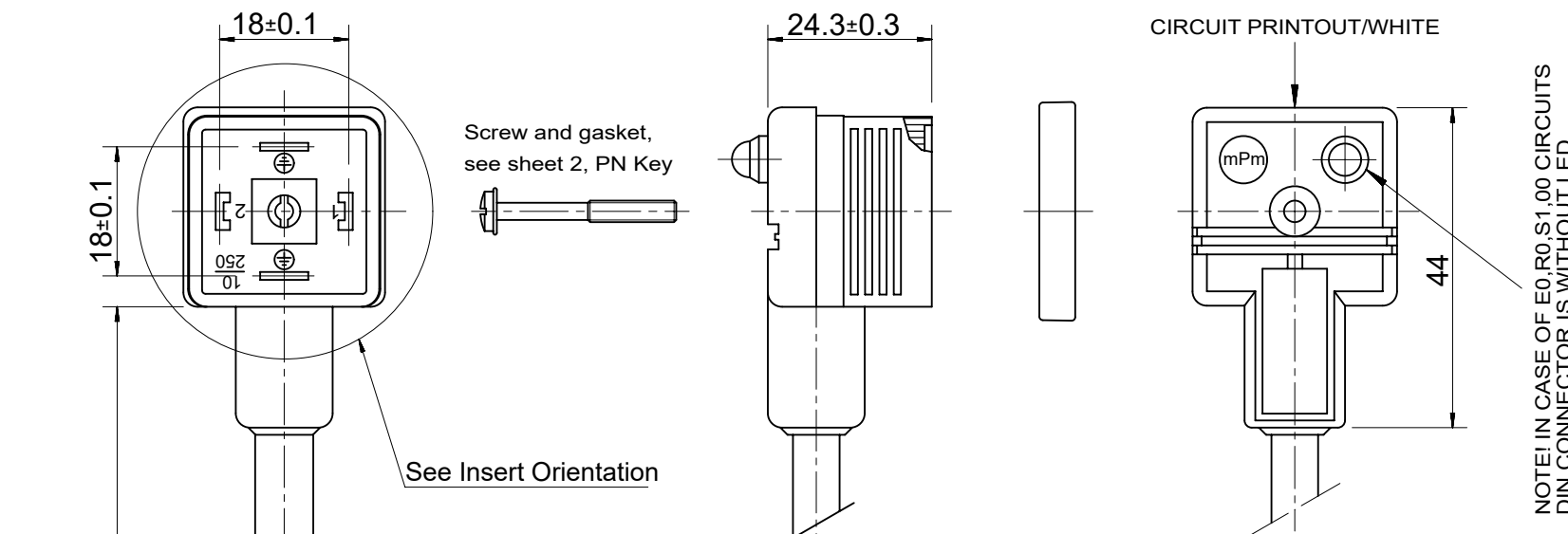


ELECTRICAL DIAGRAM S0



ELECTRICAL DIAGRAM S1





DOUBLE EARTH ON 6H & 12H E452XXXXXX1XXXX	EARTH PIN ON 12H E452XXXXXX2XXXX	EARTH PIN ON 6H E452XXXXXX6XXXX
DOUBLE EARTH ON 3H & 9H E452XXXXXX4XXXX	EARTH PIN ON 3H E452XXXXXX3XXXX	EARTH PIN ON 9H E452XXXXXX9XXXX

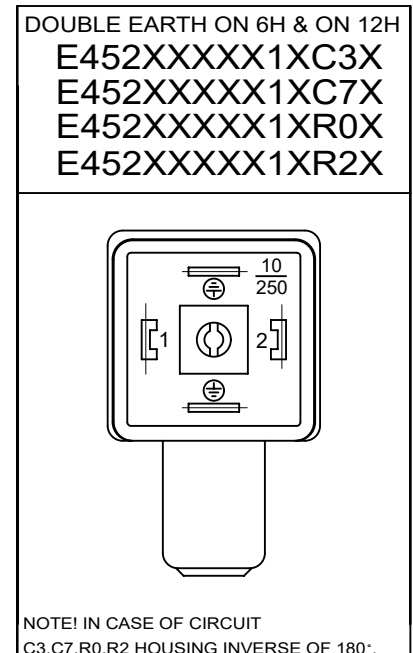


Table of length tolerances [mm]		
Over	Up to and including	Tolerance (+)
0	1000	±20
1000	3000	±30
3000	5000	±40
5000	10000	±50
10000	15000	±100
15000	20000	±150
20000		±L/100

WIRING CONFIGURATION

ELECTRICAL DIAGRAM **R0**

ELECTRICAL DIAGRAM **C4**

ELECTRICAL DIAGRAM **S0**

ELECTRICAL DIAGRAM **S3**

ELECTRICAL DIAGRAM **A1**

ELECTRICAL DIAGRAM **C3**

ELECTRICAL DIAGRAM **E0**

	10	9	8	7	6	5	4	3	2	1																																																																																																																				
	TABLE 2 - CABLES				TABLE 2 - CABLES																																																																																																																									
F	<table> <tr> <th>Molex PN Raw cable</th><th>Cable type</th><th>Cable code</th><th>Wires no.</th><th>Cross Section</th><th>Jacket material</th><th>Jacket color</th><th>Diameter Ø [mm]</th><th>Wire colors</th></tr> <tr><td>1210180080</td><td>I</td><td>0</td><td>3</td><td>1 mm²</td><td>PVC CEI 2022 II O.R.</td><td>Grey</td><td>6.4±0.2</td><td>BN, BU, GN/YE</td></tr> <tr><td>1210180467</td><td>A</td><td>2</td><td>2</td><td>20 AWG</td><td>PVC CSA/UL 2661</td><td>Black</td><td>5.4±0.2</td><td>BN, BU</td></tr> <tr><td>1210180128</td><td>A</td><td>2</td><td>3</td><td>20 AWG</td><td>PVC CSA/UL 2661</td><td>Black</td><td>5.6±0.2</td><td>BN, BU, GN/YE</td></tr> <tr><td>1210180394</td><td>A</td><td>2</td><td>4</td><td>20 AWG</td><td>PVC CSA/UL 2661</td><td>Black</td><td>6.2±0.25</td><td>BN, BU, BK, GN/YE</td></tr> <tr><td>1210180297</td><td>B</td><td>2</td><td>2</td><td>20 AWG</td><td>PUR CSA/UL 20668</td><td>Black</td><td>5.6±0.2</td><td>BN, BU</td></tr> <tr><td>1210180126</td><td>B</td><td>2</td><td>3</td><td>20 AWG</td><td>PUR CSA/UL 20668</td><td>Black</td><td>5.6±0.2</td><td>BN, BU, GN/YE</td></tr> <tr><td>1210180387</td><td>B</td><td>2</td><td>4</td><td>20 AWG</td><td>PUR CSA/UL 20668</td><td>Black</td><td>6.3±0.2</td><td>BN, BU, BK, GN/YE</td></tr> <tr><td>1210180122</td><td>D</td><td>2</td><td>3</td><td>0.5 mm²</td><td>PVC CEI 20-20</td><td>Grey</td><td>5.5±0.2</td><td>BN, BU, GN/YE</td></tr> <tr><td>1210180047</td><td>I</td><td>2</td><td>2</td><td>0.5 mm²</td><td>PVC CEI 2022 II O.R.</td><td>Grey</td><td>5.5+0.3/-0</td><td>BN, BU</td></tr> <tr><td>1210180284</td><td>I</td><td>2</td><td>3</td><td>0.5 mm²</td><td>PVC CEI 2022 II O.R.</td><td>Grey</td><td>5.5+0.3/-0</td><td>BN, BU, GN/YE</td></tr> <tr><td>1210180146</td><td>I</td><td>2</td><td>4</td><td>0.5 mm²</td><td>PVC CEI 2022 II O.R.</td><td>Grey</td><td>6.5±0.2</td><td>BN, BU, BK, GN/YE</td></tr> <tr><td>1210180177</td><td>I</td><td>2</td><td>5</td><td>0.5 mm²</td><td>PVC CEI 2022 II O.R.</td><td>Grey</td><td>7.0 +0.3/-0</td><td>BN, BU, BK, WH, GN/YE</td></tr> <tr><td>1210180022</td><td>N</td><td>2</td><td>2</td><td>0.5 mm²</td><td>PVC H03VV-F</td><td>Black</td><td>5.2±0.2</</td></tr></table>	Molex PN Raw cable	Cable type	Cable code	Wires no.	Cross Section	Jacket material	Jacket color	Diameter Ø [mm]	Wire colors	1210180080	I	0	3	1 mm²	PVC CEI 2022 II O.R.	Grey	6.4±0.2	BN, BU, GN/YE	1210180467	A	2	2	20 AWG	PVC CSA/UL 2661	Black	5.4±0.2	BN, BU	1210180128	A	2	3	20 AWG	PVC CSA/UL 2661	Black	5.6±0.2	BN, BU, GN/YE	1210180394	A	2	4	20 AWG	PVC CSA/UL 2661	Black	6.2±0.25	BN, BU, BK, GN/YE	1210180297	B	2	2	20 AWG	PUR CSA/UL 20668	Black	5.6±0.2	BN, BU	1210180126	B	2	3	20 AWG	PUR CSA/UL 20668	Black	5.6±0.2	BN, BU, GN/YE	1210180387	B	2	4	20 AWG	PUR CSA/UL 20668	Black	6.3±0.2	BN, BU, BK, GN/YE	1210180122	D	2	3	0.5 mm²	PVC CEI 20-20	Grey	5.5±0.2	BN, BU, GN/YE	1210180047	I	2	2	0.5 mm²	PVC CEI 2022 II O.R.	Grey	5.5+0.3/-0	BN, BU	1210180284	I	2	3	0.5 mm²	PVC CEI 2022 II O.R.	Grey	5.5+0.3/-0	BN, BU, GN/YE	1210180146	I	2	4	0.5 mm²	PVC CEI 2022 II O.R.	Grey	6.5±0.2	BN, BU, BK, GN/YE	1210180177	I	2	5	0.5 mm²	PVC CEI 2022 II O.R.	Grey	7.0 +0.3/-0	BN, BU, BK, WH, GN/YE	1210180022	N	2	2	0.5 mm²	PVC H03VV-F	Black	5.2±0.2</
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1210180467	A	2	2	20 AWG	PVC CSA/UL 2661	Black	5.4±0.2	BN, BU																																																																																																																						
1210180128	A	2	3	20 AWG	PVC CSA/UL 2661	Black	5.6±0.2	BN, BU, GN/YE																																																																																																																						
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1210180146	I	2	4	0.5 mm²	PVC CEI 2022 II O.R.	Grey	6.5±0.2	BN, BU, BK, GN/YE																																																																																																																						
1210180177	I	2	5	0.5 mm²	PVC CEI 2022 II O.R.	Grey	7.0 +0.3/-0	BN, BU, BK, WH, GN/YE																																																																																																																						
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	10	9	8	7	6	5	4	3	2	1		
F	TABLE 3 - PART LIST										F	
	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No.:
</												

	10	9	8	7	6	5	4	3	2	1		
F	TABLE 3 - PART LIST										F	
E	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No

	10	9	8	7	6	5	4	3	2	1		
F	TABLE 3 - PART LIST										F	
E		Pos.	Molex PN:	Engineering No.:		Pos.	Molex PN:	Engineering No.:		Pos.	Molex PN:	Engineering No.:</

TABLE 3 - PART LIST

Pos.	Molex PN:	Engineering No.:
641	2210500965	E452A2A10011R02
642	2210500966	E452A2A10011R03
643	2210500967	E452A2A10011R04
644	2210500968	E452A2A10011R05
645	2210500969	E452A2A10011R

	10	9	8	7	6	5	4	3	2	1	
F	TABLE 3 - PART LIST										F
E											E

10	9	8	7	6	5	4	3	2	1	
F	TABLE 3 - PART LIST									F
	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No.:	
	10									

	10	9	8	7	6	5	4	3	2	1	
F	TABLE 3 - PART LIST										F
	Pos.	Molex PN:	Engineering No.:		Pos.	Molex PN:	Engineering No.:		Pos.	Molex PN:	Engineering No.:
</											

	10	9	8	7	6	5	4	3	2	1	
F	TABLE 3 - PART LIST										F
E	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No.:		

	10	9	8	7	6	5	4	3	2	1	
F	TABLE 3 - PART LIST										F
E	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No.:	Pos	

	10	9	8	7	6	5	4	3	2	1	
F	TABLE 3 - PART LIST										F
E	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No.:	Pos	

	10	9	8	7	6	5	4	3	2	1		
F	TABLE 3 - PART LIST										F	
	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No

	10	9	8	7	6	5	4	3	2	1	
F	TABLE 3 - PART LIST										F
E	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN

TABLE 3 - PART LIST

Pos.	Molex PN:	Engineering No.:
2761	2210503408	E452B3A50011C4L
2762	2210503409	E452B3A50011C4M
2763	2210	

10	9	8	7	6	5	4	3	2	1
TABLE 3 - PART LIST									
F	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No.:
	2921	2210503598							

	10	9	8	7	6	5	4	3	2	1	
F	TABLE 3 - PART LIST										F
E	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No.:	Pos.	M

