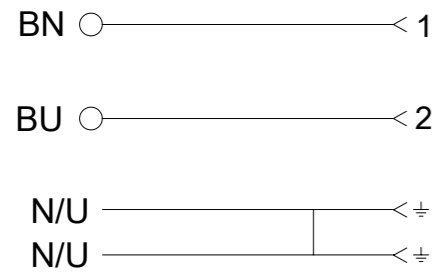
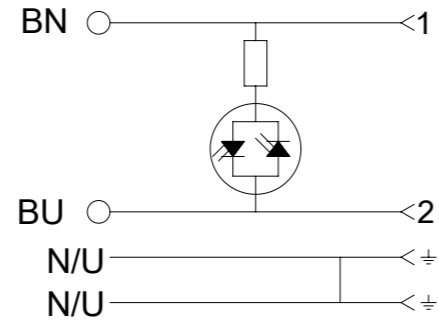


WIRING DIAGRAMS

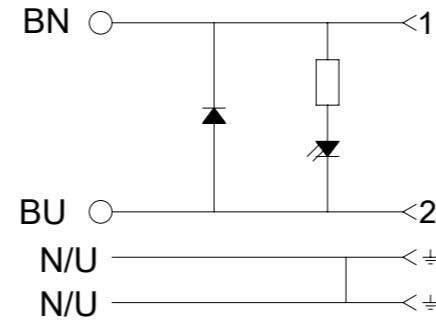
ELECTRICAL DIAGRAM 00
WITHOUT LED



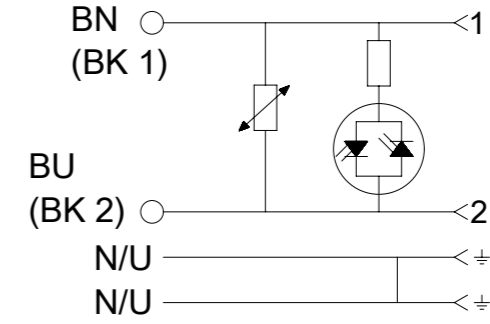
ELECTRICAL DIAGRAM A1



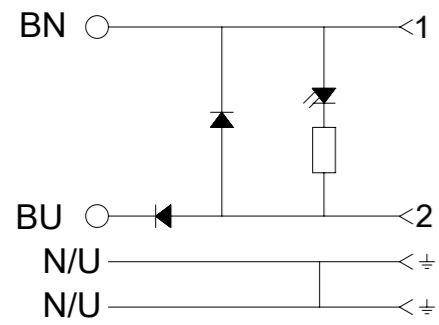
ELECTRICAL DIAGRAM C3



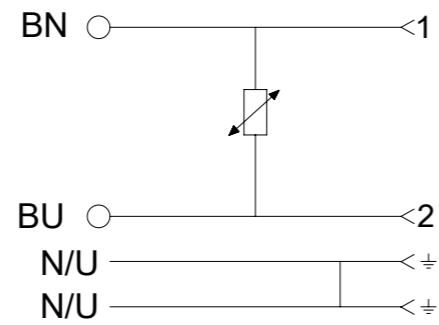
ELECTRICAL DIAGRAM C4



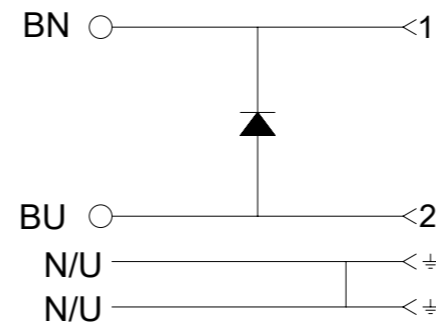
ELECTRICAL DIAGRAM C7



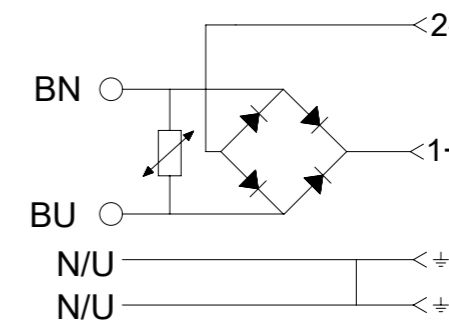
ELECTRICAL DIAGRAM D0



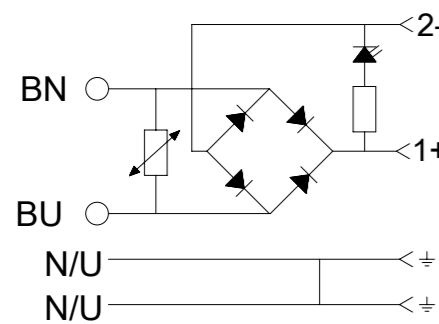
ELECTRICAL DIAGRAM E0



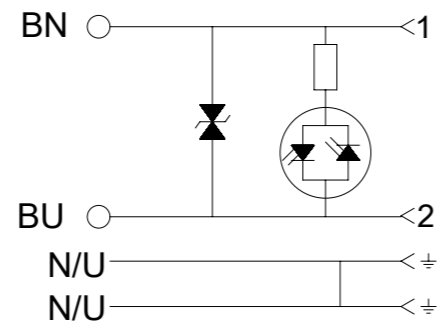
ELECTRICAL DIAGRAM R0



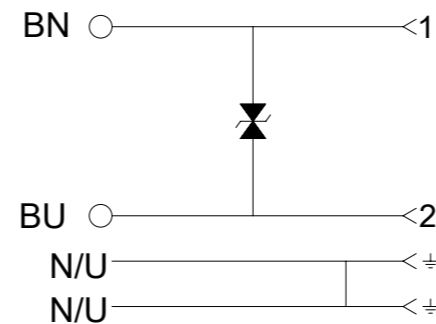
ELECTRICAL DIAGRAM R2



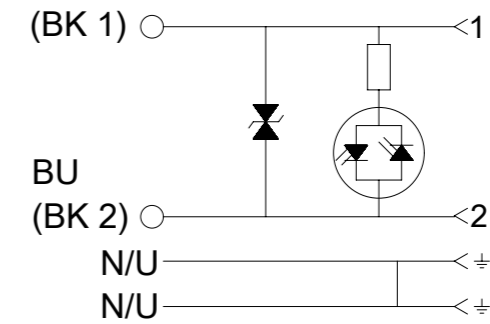
ELECTRICAL DIAGRAM S0



ELECTRICAL DIAGRAM S1

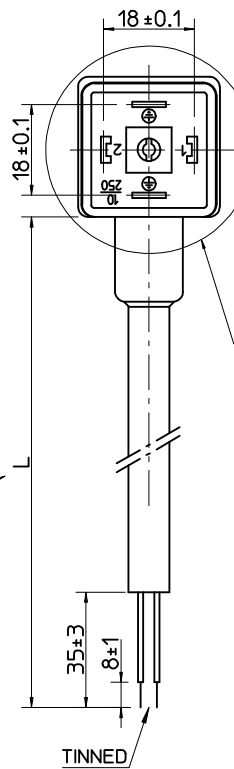


ELECTRICAL DIAGRAM S3



SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
	DIMENSION UNITS	SCALE
▽ = 0	mm	1:1
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)	
▽ = 0	ANGULAR TOL ± 1.0°	
▽ = 0	4 PLACES	±
▼ = 0	3 PLACES	±
▽ = 0	2 PLACES	± 0.05
▽ = 0	1 PLACE	± 0.3
☒ = 0	0 PLACES	± 0.5
■ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	
▽ = 0	THIRD ANGLE PROJECTION	DRAWING
		A3-SIZE
	SERIES	121050
	MATERIAL NUMBER	SEE 1210504000_PDP
	CUSTOMER	GENERAL MARKET
	SHEET NUMBER	3 OF 3
CURRENT REV DESC: MIGRATED TO ECTR		
EC NO: 619803		
DRWN: SSM	2019/06/04	
CHK'D: RSILLER	2019/06/28	
APPR: RSILLER	2019/06/28	
INITIAL REVISION:		
DRWN: SSM	2019/06/04	
APPR: RSILLER	2019/06/28	
DOCUMENT NUMBER		1210504000
DOC TYPE	DOC PART	REVISION
PSD	000	A
STANDARD E451 DIN FORM A EN 175301-803		
PRODUCT CUSTOMER DRAWING		

WIRING CONFIGURATION



Screw and gasket, see sheet 2, PN Key

See Insert Orientation

Insert Orientation

CIRCUIT PRINTOUT/WHITE

NOTE! IN CASE OF EO, R0, 00 CIRCUITS DIN CONNECTOR IS WITHOUT LED.

DOUBLE EARTH ON 6H & 12H E451XXXXXXXX1XXXX	EARTH PIN ON 12H E451XXXXXXXX2XXXX	EARTH PIN ON 6H E451XXXXXXXX6XXXX
DOUBLE EARTH ON 3H & 9H E451XXXXXXXX4XXXX	EARTH PIN ON 3H E451XXXXXXXX3XXXX	EARTH PIN ON 9H E451XXXXXXXX9XXXX

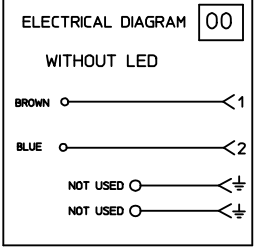
DOUBLE EARTH ON 6H & ON 12H
E451XXXXXXXX1XC3X
E451XXXXXXXX1XC7X
E451XXXXXXXX1XR0X
E451XXXXXXXX1XR2X

NOTE! IN CASE OF CIRCUIT C3,C7,R0,R2 HOUSING INVERSE OF 180°.

<p>ELECTRICAL DIAGRAM R0</p> <p>NOT USED</p>	<p>ELECTRICAL DIAGRAM C4</p> <p>NOT USED</p>	<p>ELECTRICAL DIAGRAM S0</p> <p>NOT USED</p>
<p>ELECTRICAL DIAGRAM S3</p> <p>NOT USED</p>	<p>ELECTRICAL DIAGRAM A1</p> <p>NOT USED</p>	<p>ELECTRICAL DIAGRAM C3</p> <p>NOT USED</p>
<p>ELECTRICAL DIAGRAM E0</p> <p>NOTE: Circuit E0 works from 12V to 230V Only one type in coding E452XXXXXXXE05</p>	<p>ELECTRICAL DIAGRAM R2</p> <p>NOT USED</p>	<p>ELECTRICAL DIAGRAM C7</p> <p>NOT USED</p>

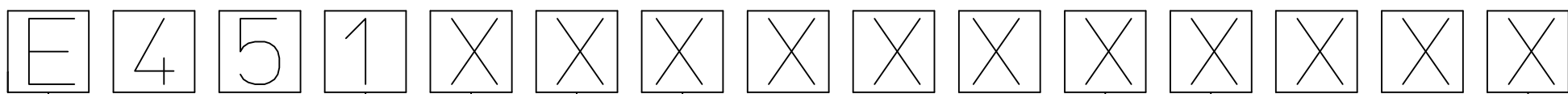
Table of lenght tolerances [mm]

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



<p>ORIGINAL RELEASE</p> <p>EC NO: IPG2013-1190</p> <p>DRWN: JMARSZALEK 2012/11/12</p> <p>CHKD: MSZWAJKOWSKI 2012/11/12</p> <p>APPR: MIWASIECZKO 2013/02/12</p>	<p>QUALITY SYMBOLS</p> <p>▽=0</p> <p>◻=0</p>	<p>GENERAL TOLERANCES (UNLESS SPECIFIED)</p> <table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr><td>4 PLACES</td><td>± ---</td><td>± ---</td></tr> <tr><td>3 PLACES</td><td>± ---</td><td>± ---</td></tr> <tr><td>2 PLACES</td><td>± ---</td><td>± ---</td></tr> <tr><td>1 PLACE</td><td>± ---</td><td>± ---</td></tr> <tr><td>0 PLACE</td><td>± ---</td><td>± ---</td></tr> </tbody> </table>			mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± ---	± ---	1 PLACE	± ---	± ---	0 PLACE	± ---	± ---	<p>DIMENSION STYLE</p> <p>MM ONLY</p>	<p>SCALE</p> <p>-</p>	<p>DESIGN UNITS</p> <p>METRIC</p>	<p>FIRST ANGLE PROJECTION</p>
			mm	INCH																					
		4 PLACES	± ---	± ---																					
		3 PLACES	± ---	± ---																					
2 PLACES	± ---	± ---																							
1 PLACE	± ---	± ---																							
0 PLACE	± ---	± ---																							
<p>ANGULAR ± --- °</p>		<p>DRAWN BY DATE</p> <p>JMARSZALEK 2012/11/12</p>	<p>TITLE</p> <p>E451XXXXXXXXXXXX</p> <p>DIN FORM A</p> <p>EN 175301-803</p>																						
<p>DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</p>		<p>CHECKED BY DATE</p> <p>MSZWAJKOWSKI 2012/11/12</p>	<p>molex</p>																						
		<p>APPROVED BY DATE</p> <p>MIWASIECZKO 2013/02/12</p>		<p>DOCUMENT NO.</p> <p>SD-121050-004</p>																					
		<p>MATERIAL NO.</p> <p>MATRIX DRAWING</p>	<p>SHEET NO.</p> <p>1 OF 3</p>																						
		<p>SIZE</p> <p>A3</p>	<p>THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</p>																						

10 9 8 7 6 5 4 3 2 1



E - Packing without bags
 W - Single packing
 Q - Quick packing

NUMBER OF WIRES:
 1=2 WIRES
 2=2 WIRES + EARTH
 3=3 WIRES + EARTH

CABLE TYPE
 SEE SHEET 3 - TABLE 1

CABLE CROSS SECTION AREA
 SEE SHEET 3 - TABLE 2

HEAD COLOUR:
 G=GREY;
 N=BLACK;
 T=TRANSPARENT;
 A=CSA-UL BLACK;
 B=CSA-UL GREY.

CABLE LENGHT IN CM
 Eg.:050=50 CM, 300=300 CM, 10K=1000 CM.

EARTH PIN LOCATION:
 1=DOUBLE EARTH ON 6H AND 12H.
 2=EARTH ON 12H.
 6=EARTH ON 6H.

TYPE OF GASKET AND SCREW:
 1=NBR PROFILE GASKET + FIXING SCREWS (M3x25 mm).
 2=NBR FLAT GASKET + FIXING SCREW (M3x25 mm).
 3=SILICONE PROFILE GASKET + FIXING SCREW (M3x25 mm).
 4=SILICON FLAT GASKET + FIXING SCREW (M3x25 mm).
 P=INTEGRATED GASKET ASSEMBLED + FIXING SCREW WITH GROMMET ASSEMBLED ON CONNECTOR (M3x27 mm).
 R=INTEGRATED GASKET + FIXING SCREW + GROMMET (M3x27 mm).
 T=PROFILE GASKET + FIXING SCREW + GROMMET (M3x27 mm).

INTERNAL CIRCUIT
 WIRING CONFIGURATION

VOLTAGE AND LED COLOUR:

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

RED LED GREEN LED YELLOW LED

ORIGINAL RELEASE EC NO: IPG2013-1190 DRWN: JMARSZALEK 2012/11/12 CHKD: MSZWAJKOWSKI 2012/11/12 APPR: MIWASIECZKO 2013/02/12	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>0 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± ---	± ---	1 PLACE	± ---	± ---	0 PLACE	± ---	± ---	DIMENSION STYLE	SCALE	DESIGN UNITS	FIRST ANGLE PROJECTION E451XXXXXXXXXX DIN FORM A EN 175301-803 SD-121050-004
			mm	INCH																				
	4 PLACES		± ---	± ---																				
	3 PLACES		± ---	± ---																				
2 PLACES	± ---	± ---																						
1 PLACE	± ---	± ---																						
0 PLACE	± ---	± ---																						
DESCRIPTION	DRAWN BY	DATE	TITLE																					
REV	CHECKED BY	DATE																						
	APPROVED BY	DATE																						
A	MATERIAL NO.		DOCUMENT NO.	SHEET NO.																				
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATRIX DRAWING THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																					

9 8 7 6 5 4 3 2 1

TABLE 2 - CABLES

Molex PN	mPm	Code	Wires	Cross Section	Material	Color	Diameter Ø	DIN A-B	DIN C
1210180080	I	0	3	1 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	6,4±0,2 mm	OK.	-
1210180467	A	2	2	20 AWG	PVC CSA/UL 2661	Black	5,4±0,2 mm	OK.	OK.
1210180128	A	2	3	20 AWG	PVC CSA/UL 2661	Black	5,6±0,2 mm	OK.	OK.
1210180394	A	2	4	20 AWG	PVC CSA/UL 2661	Black	6,2±0,25 mm	OK.	OK.
-	A	2	5	20 AWG	PVC CSA/UL 2661	Black	7±0,2 mm	OK.	-
1210180297	B	2	2	20 AWG	PUR CSA/UL 20668	Black	5,6±0,2 mm	OK.	OK.
1210180126	B	2	3	20 AWG	PUR CSA/UL 20668	Black	5,6±0,2 mm	OK.	OK.
1210180387	B	2	4	20 AWG	PUR CSA/UL 20668	Black	6,2±0,2 mm	OK.	OK.
-	B	2	5	20 AWG	PUR CSA/UL 20668	Black	7±0,2 mm	OK.	-
1210180122	D	2	3	0,5 mm2	PVC TI2 CEI 20-20	Grey	5,5±0,2 mm	OK.	OK.
-	F	2	3	0,5 mm2	CNOMO	Grey RAL7000	5,5±0,2 mm	OK.	OK.
1210180047	I	2	2	0,5 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	5,5±0,3/-0 mm	OK.	OK.
1210180284	I	2	3	0,5 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	5,6±0,3/-0 mm	OK.	OK.
1210180146	I	2	4	0,5 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	6,5±0,2 mm	OK.	OK.
1210180177	I	2	5	0,5 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	7±0,2 mm	OK.	-
1210180022	N	2	2	0,5 mm2	PVCH03	Black	5,2±0,2 mm	OK.	OK.
1202092753	N	2	3	0,5 mm2	PVCH03	Black	5,5±0,2 mm	OK.	OK.
1210180153	N	2	4	0,5 mm2	PVCH03	Black	6,9 mm max	OK.	OK.
1210180046	P	2	2	0,5 mm2	PUR - BLEND	Black	5,5±0,2 mm	OK.	OK.
1202092439	P	2	3	0,5 mm2	PUR - BLEND	Black	5,5 +0,3/-0 mm	OK.	OK.
1210180302	P	2	4	0,5 mm2	PUR - BLEND	Black	6,5±0,2 mm	OK.	OK.
1202092215	P	2	5	0,5 mm2	PUR - BLEND	Black	7+0,3/-0,1 mm	OK.	OK.
1210180409	A	3	2	18 AWG	PVC CSA/UL 2661	Black	6,5±0,25 mm	OK.	-
1210180129	A	3	3	18 AWG	PVC CSA/UL 2661	Black	6,5±0,25 mm	OK.	-
1210180159	A	3	4	18 AWG	PVC CSA/UL 2661	Black	7±0,3 mm	OK.	-
1210180464	A	3	5	18 AWG	PVC CSA/UL 2661	Black	7,8±0,25 mm	OK.	-
1210180351	B	3	2	18 AWG	PUR CSA/UL 20668	Black	6,8±0,2 mm	OK.	-
1210180127	B	3	3	18 AWG	PUR CSA/UL 20668	Black	6,5±0,2 mm	OK.	-
1210180160	B	3	4	18 AWG	PUR CSA/UL 20668	Black	7±0,2 mm	OK.	-
1210180463	B	3	5	18 AWG	PUR CSA/UL 20668	Black	7,8±0,2 mm	OK.	-
1210180073	D	3	3	0,75 mm2	PVC TI2 CEI 20-20	Grey	6,5±0,2 mm	OK.	OK.
1210180145	D	3	4	0,75 mm2	PVC TI2 CEI 20-20	Grey	7,1±0,2 mm	OK.	-
1202098208	I	3	2	0,75 mm2	PVC CEI 2022 II O.R.	Grey RAL7001	5,5±0,2 mm	OK.	-
1210180120	I	3	3	0,75 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	6±0,2 mm	OK.	-
1210180143	I	3	4	0,75 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	7±0,2 mm	OK.	-
1210180032	N	3	2	0,75 mm2	PVCH05	Black	6,2±0,2 mm	OK.	-
1210180069	N	3	3	0,75 mm2	PVCH05	Black	6,5±0,2 mm	OK.	-
1210180144	N	3	4	0,75 mm2	PVCH05	Black	7,1±0,2 mm	OK.	-
1210180174	N	3	5	0,75 mm2	PVCH05	Black	8,0±0,2-0 mm	OK.	-
1202094190	P	3	2	0,75 mm2	PUR - BLEND	Black	6,5±0,2 mm	OK.	-

TABLE 2 - CABLES

Molex PN	mPm	Code	Wires	Cross Section	Material	Color	Diameter Ø	DIN A-B	DIN C
1210180071	P	3	3	0,75 mm2	PUR - BLEND	Black	6,5±0,2 mm	OK.	-
1210180152	P	3	4	0,75 mm2	PUR - BLEND	Black	7±0,2 mm	OK.	-
1210180384	R	3	3	0,75 mm2	TPR HAL. FREE	Black	6,5±0,2 mm	OK.	-
1210180094	T	3	3	0,75 mm2	PUR CSA/UL	Yellow	6,5±0,2 mm	OK.	-
1210180309	Y	3	3	0,75 mm2	SIL/0300	Red	6,5±0,2 mm	OK.	-
1210180081	F	4	3	1 mm2	CNOMO	Grey RAL7000	7,1+0,2/-0 mm	OK.	-
-	F	4	4	1 mm2	CNOMO	Grey RAL7000	7,1+0,2/-0 mm	OK.	-
1210180042	I	4	2	1 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	7,1+0,2/-0 mm	OK.	-
1210180079	I	4	3	1 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	7,1+0,2/-0 mm	OK.	-
1210180036	N	4	2	1 mm2	PVCH05	Black	6,5±0,2 mm	OK.	-
1210180082	N	4	3	1 mm2	PVCH05	Black	6,9±0,2 mm	OK.	-
1210180117	R	4	3	1 mm2	TPR HAL. FREE	Black	7,1±0,2 mm	OK.	-
1210180085	N	5	3	1,5 mm2	PVCH05	Black	8,3+0,2/-0 mm	OK.	-
1210180313	I	6	2	0,35 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	4,8±0,2 mm	OK.	-
-	A	7	3	20 AWG	PVC CSA/UL 2661	Yellow	5,6±0,2 mm	OK.	OK.
1210180149	I	9	4	0,75 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	7,3±0,2 mm	OK.	-

TABLE 1 - CABLES TYPE

Code	Cable types	Features	Stranding
N	PVC	Application general purpose cable which has good resistance to water, but usually poor oil resistance.	0,5 mm2 = 15 x 0,20 0,75 mm2 = 21 x 0,20 1 mm2 = 28 x 0,20
I	CEI	Approved to IEC 332-2A, flame retardant and self extinguishing. Limited resistant to mineral oils.	0,5 mm2 = 28 x 0,15 0,75 mm2 = 42 x 0,15 1 mm2 = 32 x 0,20
P	PUR	Offer good resistance to oil and chemicals. Can swell when constantly immersed in water.	0,5 mm2 = 28 x 0,15 0,75 mm2 = 42 x 0,15 1 mm2 = 32 x 0,20
A	PVC CSA-UL	Approved to CSA-UL 2661, application general purpose cable which has good resistance to water, but usually poor oil resistance.	20 AWG = 32 x 0,15 18 AWG = 52 x 0,15
B	PUR CSA-UL	Approved to CSA-UL 20668, very good resistance to oil and chemicals.	20 AWG = 32 x 0,15 18 AWG = 52 x 0,15

ORIGINAL RELEASE EC NO: IPG2013-1190 DRWN: JMARSZALEK 2012/11/12 CHKD: MSZWAJKOWSKI 2012/11/12 APPR: MIWASIECZKO 2013/02/12	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE -	DESIGN UNITS METRIC	FIRST ANGLE PROJECTION		
			mm	INCH	DRAWN BY	DATE	TITLE			
		4 PLACES	± ---	± ---	JMARSZALEK	2012/11/12	E451XXXXXXXXXXXX DIN FORM A EN 175301-803 molex			
		3 PLACES	± ---	± ---	CHECKED BY	DATE				
2 PLACES	± ---	± ---	MSZWAJKOWSKI 2012/11/12		DOCUMENT NO.					
1 PLACE	± ---	± ---	APPROVED BY		DATE	SHEET NO.				
0 PLACE	± ---	± ---	MIWASIECZKO 2013/02/12		3 OF 3					
ANGULAR ±---°		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.		MATRIX DRAWING				
SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION								