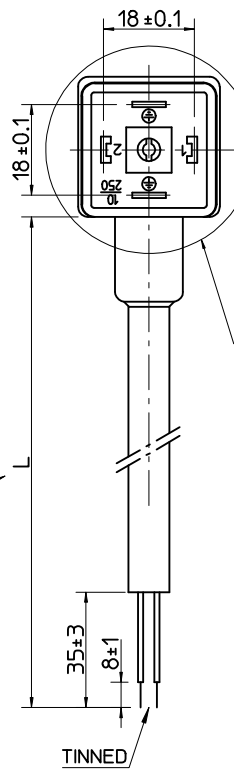


WIRING CONFIGURATION



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

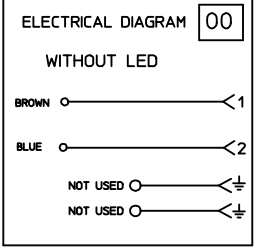
DOUBLE EARTH ON 6H & ON 12H
E451XXXXXXXX1XC3X
E451XXXXXXXX1XC7X
E451XXXXXXXX1XR0X
E451XXXXXXXX1XR2X

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

<p>ELECTRICAL DIAGRAM R0</p>	<p>ELECTRICAL DIAGRAM C4</p>	<p>ELECTRICAL DIAGRAM S0</p>
<p>ELECTRICAL DIAGRAM S3</p>	<p>ELECTRICAL DIAGRAM A1</p>	<p>ELECTRICAL DIAGRAM C3</p>
<p>ELECTRICAL DIAGRAM E0</p> <p>Note: Circuit E0 works from 12V to 230V Only one type in coding E452XXXXXXE05</p>	<p>ELECTRICAL DIAGRAM R2</p>	<p>ELECTRICAL DIAGRAM C7</p>

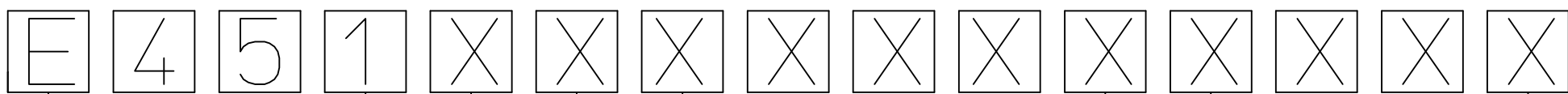
Table of lenght tolerances [mm]

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>DRAWN BY</p> <p>JMARSZALEK</p>	<p>DATE</p> <p>2012/11/12</p>	<p>TITLE</p> <p>E451XXXXXXXXXXXX</p> <p>DIN FORM A</p> <p>EN 175301-803</p>																						
<p>CHECKED BY</p> <p>MSZWAJKOWSKI</p>	<p>DATE</p> <p>2012/11/12</p>	<p>MATERIAL NO.</p> <p>MATRIX DRAWING</p>	<p>DOCUMENT NO.</p> <p>SD-121050-004</p>	<p>SHEET NO.</p> <p>1 OF 3</p>																				
<p>APPROVED BY</p> <p>MIWASIECZKO</p>	<p>DATE</p> <p>2013/02/12</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 LENGTH 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)	DIMENSION STYLE MM ONLY	SCALE -	DESIGN UNITS METRIC	FIRST ANGLE PROJECTION
	▽=0 ◻=0	mm INCH	DRAWN BY DATE JMARSZALEK 2012/11/12	TITLE E451XXXXXXXXXX DIN FORM A EN 175301-803		
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- 0 PLACE ± --- ± ---	CHECKED BY DATE MSZWAJKOWSKI 2012/11/12	APPROVED BY DATE MIWASIECZKO 2013/02/12		
		ANGULAR ± --- °	MATERIAL NO.	DOCUMENT NO.		
A	REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SIZE A3	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		SD-121050-004 3 OF 3					
1 PLACE	± ---	± ---	APPROVED BY						DOCUMENT NO.	
0 PLACE	± ---	± ---	MIWASIECZKO 2013/02/12		MATRIX DRAWING					
ANGULAR ±---°		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				