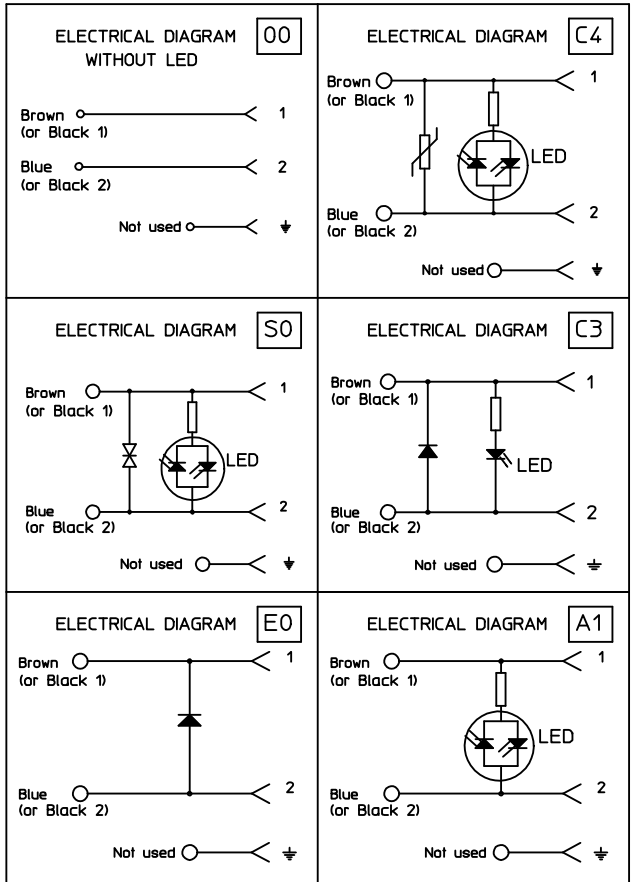


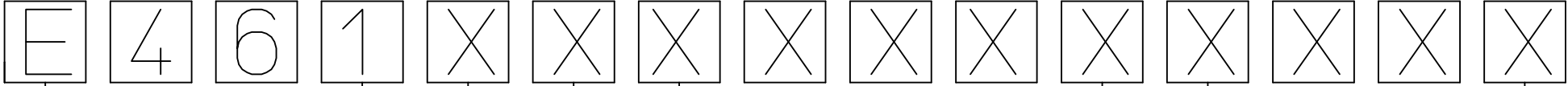
Table of length tolerances [mm]

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



ORIGINAL RELEASE IEC NO: IPG2016-0461 DRWN: JMARSZALEK 2013/09/03 CHKD: MSZWAJKOWSKI 2013/09/03 APPR: MIWASIECZKO 2015/09/28	QUALITY SYMBOLS 	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE	DESIGN UNITS METRIC	FIRST ANGLE PROJECTION		
		4 PLACES	±---	±---	DRAWN BY	DATE	TITLE			
		3 PLACES	±---	±---	JMARSZALEK	2013/09/03	E461XXXXXXXXXXXX FORM INDUSTRIAL			
		2 PLACES	±---	±---	CHECKED BY	DATE				
1 PLACE	±---	±---	MSZWAJKOWSKI	2013/09/03						
0 PLACE	±---	±---	APPROVED BY	DATE						
		ANGULAR ±---°		MATERIAL NO.		DOCUMENT NO.		SHEET NO.		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 2 & 4		SD-121050-008		1 OF 4		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1



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

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

CABLE TYPE
SEE TABLE 1

CABLE CROSS SECTION AREA
SEE TABLE 2

HEAD COLOUR:
N=BLACK;
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:
2=EARTH ON 12H,
6=EARTH ON 6H.

GASKET SCREWS:
1=NBR PROFILE GASKET+FIXING SCREWS (M3x25 mm).
2=NBR FLAT GASKET+SCREW (M3x25 mm).
3=SILICONE PROFILE GASKET+SCREW (M3x25 mm).
4=SILICON FLAT GASKET+SCREW (M3x25 mm).
P=INTEGRATED GASKET+FIXING SCREW+GROMMET (M3x27 mm).
R=INTAGRATED GASKET+SCREW+GROMMET (M3x27 mm).
T=PROFILE GASKET+SCREW+GROMMET (M3x27 mm).

INTERNAL CIRCUIT
WIREING 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: IPG2016-0461 DRWN: JMARSZALEK 2013/09/03 CHKD: MSZWAJKOWSKI 2013/09/03 APPR: MIWASIECZKO 2015/09/28	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 1:1	DESIGN UNITS METRIC	FIRST ANGLE PROJECTION		
			mm	INCH	DRAWN BY JMARSZALEK	DATE 2013/09/03	TITLE E461XXXXXXXXXX FORM INDUSTRIAL		
		4 PLACES	± ---	± ---	CHECKED BY MSZWAJKOWSKI	DATE 2013/09/03			
		3 PLACES	± ---	± ---	APPROVED BY MIWASIECZKO	DATE 2015/09/28	molex DOCUMENT NO. SD-121050-008 SHEET NO. 2 OF 4		
		2 PLACES	± ---	± ---	MATERIAL NO. SEE PN KEY				
1 PLACE	± ---	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
0 PLACE	± ---	± ---	ANGULAR ± --- °						

9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1

TABLE 2 - CABLES

Molex PN Raw cable	Cable type	Cable code	Wires no.	Cross Section	Jacket material	Jacket color	Diameter Ø [mm]	Wire colors
1202091424	I	0	3	1 mm ²	PVC CEI 2022 II O.R.	Grey	7.6±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
1210180284	D	2	3	0.5 mm ²	PVC CEI 20-20	Grey	5.5+0.3/-0	BN, BU, GN/YE
1210180047	I	2	2	0.5 mm ²	PVC CEI 2022 II O.R.	Grey	5.5+0.3/-0	BN, BU
1210180284	I	2	3	0.5 mm ²	PVC CEI 2022 II O.R.	Grey	5.5+0.3/-0	BN, BU, GN/YE
1210180146	I	2	4	0.5 mm ²	PVC CEI 2022 II O.R.	Grey	6.5±0.2	BN, BU, BK, GN/YE
1210180177	I	2	6	0.5 mm ²	PVC CEI 2022 II O.R.	Grey	7.0 +0.3/-0	BN, BU, BK, WH, GN/YE
1210180022	N	2	2	0.5 mm ²	PVC H03VV-F	Black	5.2±0.2	BN, BU
1202092753	N	2	3	0.5 mm ²	PVC H03VV-F	Black	5.5±0.2	BN, BU, GN/YE
1210180153	N	2	4	0.5 mm ²	PVC H03VV-F	Black	5.9±0.3	BN, BU, BK, GN/YE
1210180046	P	2	2	0.5 mm ²	PUR - BLEND	Black	5.5±0.2	BN, BU
1202092439	P	2	3	0.5 mm ²	PUR - BLEND	Black	5.5 +0.3/-0	BN, BU, GN/YE
1210180302	P	2	4	0.5 mm ²	PUR - BLEND	Black	6.5±0.2	BN, BU, BK, GN/YE
1202092215	P	2	6	0.5 mm ²	PUR - BLEND	Black	7+0.3/-0.1	BN, BU, BK, WH, GN/YE
1210180409	A	3	2	18 AWG	PVC CSA/UL 2661	Black	6.2±0.25	BN, BU
1210180129	A	3	3	18 AWG	PVC CSA/UL 2661	Black	6.5±0.25	BN, BU, GN/YE
1210180159	A	3	4	18 AWG	PVC CSA/UL 2661	Black	7.0+0.3/-0	BN, BU, BK, GN/YE
1210180464	A	3	5	18 AWG	PVC CSA/UL 2661	Black	7.8±0.25	BN, BU, BK, WH, GN/YE
1210180351	B	3	2	18 AWG	PUR CSA/UL 20668	Black	6.2±0.2	BN, BU
1210180127	B	3	3	18 AWG	PUR CSA/UL 20668	Black	6.5±0.2	BN, BU, GN/YE
1210180160	B	3	4	18 AWG	PUR CSA/UL 20668	Black	7±0.2	BN, BU, BK, GN/YE
1210180463	B	3	6	18 AWG	PUR CSA/UL 20668	Black	7.8±0.25	BN, BU, BK, WH, GN/YE
1210180073	D	3	3	0.75 mm ²	PVC CEI 20-20	Grey	6.5±0.2	BN, BU, GN/YE
1210180145	D	3	4	0.75 mm ²	PVC CEI 20-20	Grey	7.1±0.2	BN, BU, BK, GN/YE
1202098206	I	3	2	0.75 mm ²	PVC CEI 2022 II O.R.	Grey	5.5±0.2	BK1, BK2
1210180120	I	3	3	0.75 mm ²	PVC CEI 2022 II O.R.	Grey	6.0±0.2	BK1, BK2, BK3
1210180143	I	3	4	0.75 mm ²	PVC CEI 2022 II O.R.	Grey	7.0±0.2	BN, BU, BK, GN/YE
1210180032	N	3	2	0.75 mm ²	PVC H05VV-F	Black	6.2±0.2	BN, BU
1210180069	N	3	3	0.75 mm ²	PVC H05VV-F	Black	6.5±0.2	BN, BU, GN/YE
1210180144	N	3	4	0.75 mm ²	PVC H05VV-F	Black	7.1±0.2	BN, BU, BK, GN/YE
1210180174	N	3	6	0.75 mm ²	PVC H05VV-F	Black	8.0+0.2/-0	BN, BU, BK, GY, GN/YE
1202094190	P	3	2	0.75 mm ²	PUR - BLEND	Black	6.5±0.2	BN, BU
1210180071	P	3	3	0.75 mm ²	PUR - BLEND	Black	6.5±0.2	BN, BU, GN/YE
1210180152	P	3	4	0.75 mm ²	PUR - BLEND	Black	7.0±0.2	BN, BU, BK, GN/YE

TABLE 2 - CABLES

Molex PN Raw cable	Cable type	Cable code	Wires no.	Cross Section	Jacket material	Jacket color	Diameter Ø [mm]	Wire colors
1210180384	R	3	3	0.75 mm ²	TPR HAL. FREE	Black	6.5±0.2	BN, BU, GN/YE
1210180094	T	3	3	0.75 mm ²	PUR CSA/UL 20668	Yellow	6.5±0.2	BN, BU, GN/YE
1210180309	Y	3	3	0.75 mm ²	SILICONE RUBBER	Red	6.5±0.2	BN, BU, GN/YE
1210180081	F	4	3	1 mm ²	PVC CNOMO	Grey	7.1+0.2/-0	BK1, BK2, GN/YE
1210180042	I	4	2	1 mm ²	PVC CEI 2022 II O.R.	Grey	7.1+0.2/-0	BN, BU
1210180079	I	4	3	1 mm ²	PVC CEI 2022 II O.R.	Grey	7.1+0.2/-0	BN, BU, GN/YE
1210180036	N	4	2	1 mm ²	PVC H05VV-F	Black	6.5±0.2	BN, BU
1210180082	N	4	3	1 mm ²	PVC H05VV-F	Black	6.9±0.2	BN, BU, GN/YE
1210180117	R	4	3	1 mm ²	TPR HAL. FREE	Black	7.1±0.2	BN, BU, GN/YE
1210180085	N	5	3	1.5 mm ²	PVC H05VV-F	Black	7.9±0.2	BN, BU, GN/YE
1210180313	I	6	2	0.35 mm ²	PVC CEI 2011	Grey	4.8±0.2	BN, WH
1210180148	I	9	4	0.75 mm ²	PVC CEI 2022 II	Grey	7.3±0.2	BN, BU, BK, GN/YE

TABLE 1 - TYPES OF CABLES

Code	Cable types	Features	Cross Section
N	PVC	Application general purpose cable which has good resistance to water, but usually poor oil resistance.	0.5 mm ² 0.75 mm ² 1 mm ²
I	CEI	Approved to IEC 332-2A, flame retardant and self extinguishing. Limited resistant to mineral oils.	0.5 mm ² 0.75 mm ² 1 mm ²
P	PUR	Offer good resistance to oil and chemicals. Can swell when constantly immersed in water.	0.5 mm ² 0.75 mm ² 1 mm ²
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 18 AWG
B	PUR CSA-UL	Approved to CSA-UL 20668, very good resistance to oil and chemicals.	20 AWG 18 AWG


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	▼ = 0 ◻ = 0	mm INCH	MM ONLY	1:1	METRIC		
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- 0 PLACE ± --- ± ---	DRAWN BY DATE JMARSZALEK 2013/09/03 CHECKED BY DATE MSZWAJKOWSKI 2013/09/03 APPROVED BY DATE MIWASIECZKO 2015/09/28	TITLE	E461XXXXXXXXXX FORM INDUSTRIAL		
		ANGULAR ± --- °	SEE SHEET 2 & 4	MATERIAL NO.	DOCUMENT NO.	 SD-121050-008	
	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			SHEET NO.	3 OF 4

TABLE 3 - PART LIST

Molex PN:	Engineering No.:
1210500910	E46112N50021C4H
1210500911	E46114N10K21C4H
1210500914	E46114N20021C4H
1210500920	E46114N50021C4H
1210500923	E461N2N12K21C32
1210500941	E461P2N15021C42
1210501649	E46112N30061A12
1210501650	E46112N15061A12
1210501743	E46112N50061C4H
1210501775	E46112N10K61C4H
1210501776	E46112N10061C4H
1210501807	E46112N30061C4H
1210501843	E46112N20061A12
1210501870	E46112N30021A12
1210502047	E461N3N30021C42
1210502048	E461B3A1002PC4B
1210502067	E461P2N15021C4H
1210502229	E461P2N15061C4H
1210502252	E461N2N15021C42
1210502478	E461P2N10061C4H
1210502483	E461N3N50061C4H
1210502714	W461P2N15021C4H
1210502745	W461P2N1502PC4H
1210502969	W461P2N15061C4H
1210503207	E46114N30061A12
1210503208	E46114N50061A12
1210503209	E46114N10K61A12
1210503210	E46114N30061C42
1210503211	E46114N50061C42
1210503212	E46114N10K61C42
1210503289	E461N2N30021C4H
1210503303	E461N2N20021C4H
1210503436	E461N2N2002PC4H
1210503465	E46112N1506TC42

ORIGINAL RELEASE EC NO: IPG2016-0461 DRWN: JMARSZALEK 2013/09/03 CHKD: MSZWAJKOWSKI 2013/09/03 APPR: MIWASIECZKO 2015/09/28	DESCRIPTION REV	QUALITY SYMBOLS =0 =0	GENERAL TOLERANCES (UNLESS SPECIFIED) <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	± ---	± ---	DIMENSION STYLE MM ONLY	SCALE 1:1	DESIGN UNITS METRIC	FIRST ANGLE PROJECTION
			mm	INCH																					
		4 PLACES	± ---	± ---																					
		3 PLACES	± ---	± ---																					
		2 PLACES	± ---	± ---																					
1 PLACE	± ---	± ---																							
0 PLACE	± ---	± ---																							
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: JMARSZALEK CHECKED BY: MSZWAJKOWSKI APPROVED BY: MIWASIECZKO	DATE: 2013/09/03 DATE: 2013/09/03 DATE: 2015/09/28	TITLE E461XXXXXXXXXX FORM INDUSTRIAL																				
			MATERIAL NO. SEE TABLE 3	DOCUMENT NO. SD-121050-008			SHEET NO. 4 OF 4																		
			SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																					