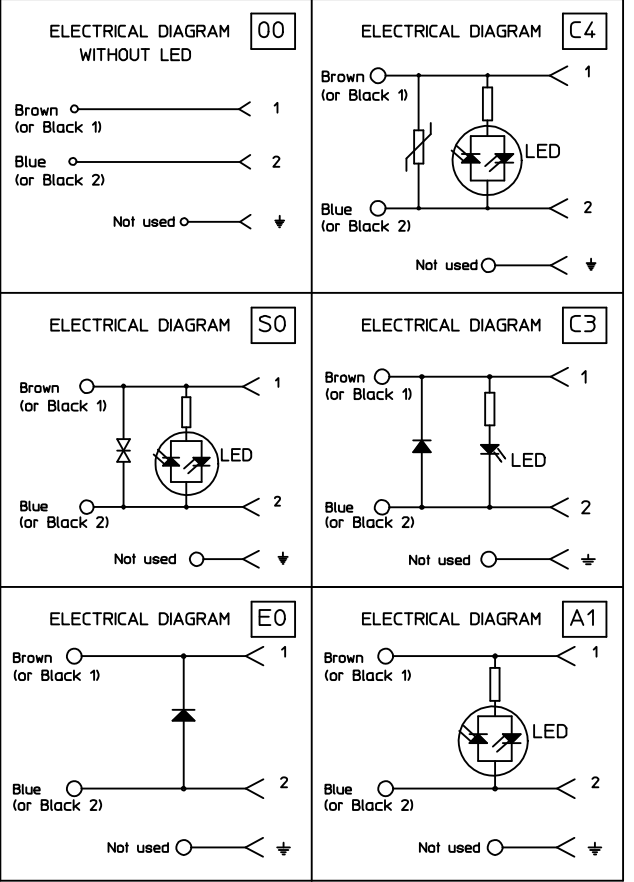


Table of length tolerances [mm]

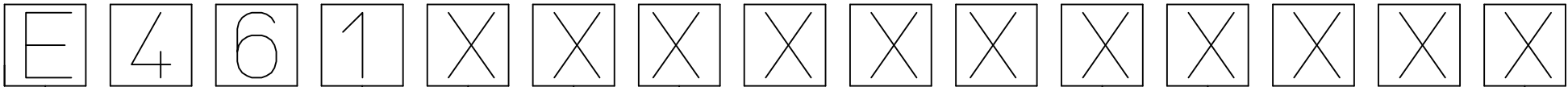
Over	Up to and including	Tolerance (+)
0	1000	±20
1000	3000	±30
3000	5000	±40
5000	10000	±50
10000	15000	±100
15000	20000	±150
20000		±L/100



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 ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- 0 PLACE ± --- ± ---	mm INCH ± --- ± --- ± --- ± --- ± --- ± --- ± --- ± --- ± --- ± ---	DRAWN BY JMARSZALEK	DATE 2013/09/03	TITLE E461XXXXXXXXXX FORM INDUSTRIAL			
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		CHECKED BY MSZWAJKOWSKI	DATE 2013/09/03	molex DOCUMENT NO. SD-121050-008			
	MATERIAL NO. SEE SHEET 2 & 4		APPROVED BY MIWASIECZKO	DATE 2015/09/28				

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 LENGTH 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	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	FIRST ANGLE PROJECTION
	▽=0 ◻=0	mm	INCH	MM ONLY	1:1	METRIC	
	DESCRIPTION	4 PLACES	± ---	± ---	DRAWN BY	DATE	TITLE
	REV	3 PLACES	± ---	± ---	JMARSZALEK	2013/09/03	E461XXXXXXXXXX FORM INDUSTRIAL
	2 PLACES	± ---	± ---	CHECKED BY	DATE		
	1 PLACE	± ---	± ---	MSZWAJKOWSKI	2013/09/03		
	0 PLACE	± ---	± ---	APPROVED BY	DATE		
		ANGULAR ± --- °		MIWASIECZKO	2015/09/28		
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE PN KEY		MATERIAL NO.	DOCUMENT NO.	SHEET NO.
			SIZE A3		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

Mollex 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

Mollex 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

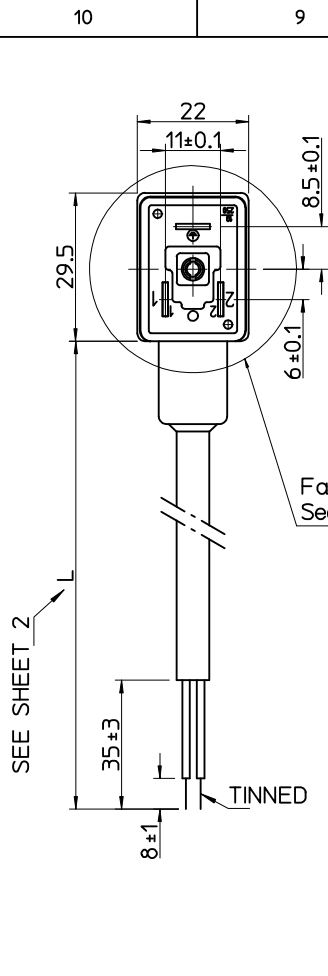
Code	Cable types	Features	Cross Section
N	PVC	Application general purpose cable which has good resistance to water, but usually poor oil resistance.	0.5 mm ² 0.75 mm ² 1 mm ²
I	CEI	Approved to IEC 332-2A, flame retardant and self extinguishing. Limited resistant to mineral oils.	0.5 mm ² 0.75 mm ² 1 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

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													
		<table border="1"> <tr><th>mm</th><th>INCH</th></tr> <tr><td>4 PLACES</td><td>± --- ± ---</td></tr> <tr><td>3 PLACES</td><td>± --- ± ---</td></tr> <tr><td>2 PLACES</td><td>± --- ± ---</td></tr> <tr><td>1 PLACE</td><td>± --- ± ---</td></tr> <tr><td>0 PLACE</td><td>± --- ± ---</td></tr> </table>	mm	INCH	4 PLACES	± --- ± ---	3 PLACES	± --- ± ---	2 PLACES	± --- ± ---	1 PLACE	± --- ± ---	0 PLACE	± --- ± ---	DRAWN BY JMARSZALEK	DATE 2013/09/03	TITLE E461XXXXXXXXXX FORM INDUSTRIAL		
		mm	INCH																
		4 PLACES	± --- ± ---																
3 PLACES	± --- ± ---																		
2 PLACES	± --- ± ---																		
1 PLACE	± --- ± ---																		
0 PLACE	± --- ± ---																		
ANGULAR ±---°	CHECKED BY MSZWAJKOWSKI	DATE 2013/09/03																	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	APPROVED BY MIWASIECZKO	DATE 2015/09/28																	
A	REV	SEE SHEET 2 & 4	MATERIAL NO.	DOCUMENT NO. SD-121050-008	SHEET NO. 3 OF 4														

TABLE 3 - PART LIST

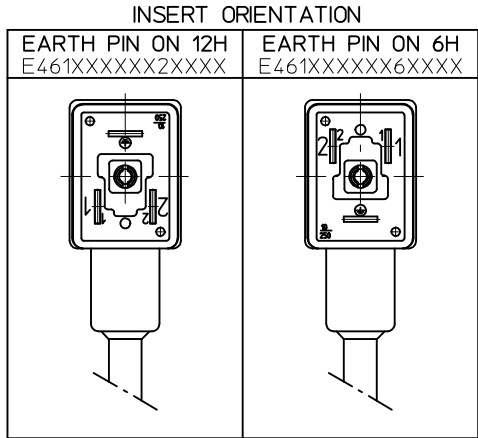
Molex PN:	Engineering No.:
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1210500914	E46114N20021C4H
1210500920	E46114N50021C4H
1210500923	E461N2N12K21C32
1210500941	E461P2N15021C42
1210501649	E46112N30061A12
1210501650	E46112N15061A12
1210501743	E46112N50061C4H
1210501775	E46112N10K61C4H
1210501776	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																					



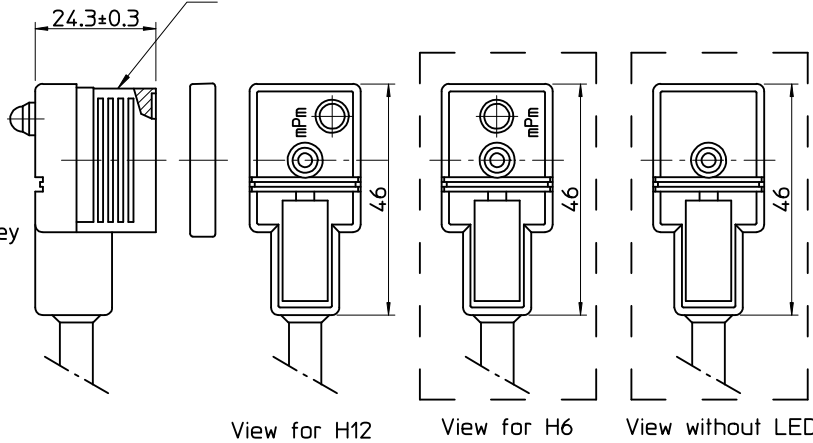
Screw and gasket, see sheet 2, PN Key

Face View
See Insert Orientation



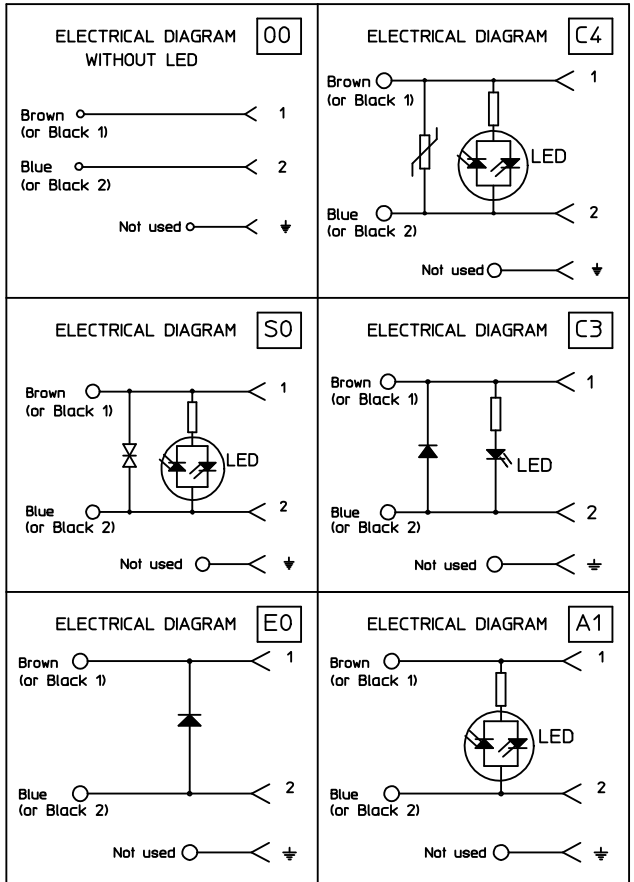
INSERT ORIENTATION

CIRCUIT PRINTOUT/WHITE



View for H12 View for H6 View without LED

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

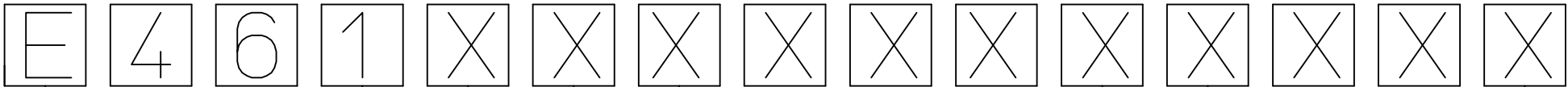
REV	DESCRIPTION
1	QUALITY SYMBOLS
2	QUALITY SYMBOLS

	GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm	INCH
4 PLACES	±---	±---
3 PLACES	±---	±---
2 PLACES	±---	±---
1 PLACE	±---	±---
0 PLACE	±---	±---
ANGULAR ±---°		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		

DIMENSION STYLE	
MM ONLY	
DRAWN BY	DATE
JMARSZALEK	2013/09/03
CHECKED BY	DATE
MSZWAJKOWSKI	2013/09/03
APPROVED BY	DATE
MIWASIECZKO	2015/09/28
MATERIAL NO.	
SEE SHEET 2 & 4	

SCALE	DESIGN UNITS	FIRST ANGLE PROJECTION
	METRIC	
TITLE		
E461XXXXXXXXXX FORM INDUSTRIAL		
molex		
DOCUMENT NO.		SHEET NO.
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 LENGTH 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).
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R=INTAGRATED GASKET+SCREW+GROMMET (M3x27 mm).
T=PROFILE GASKET+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: 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	
					CHECKED BY MSZWAJKOWSKI	DATE 2013/09/03		
					APPROVED BY MIWASIECZKO	DATE 2015/09/28		
		ANGULAR ±---°		MATERIAL NO.	DOCUMENT NO. SD-121050-008		SHEET NO. 2 OF 4	
		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			

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

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 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 ±---°	MATERIAL NO.	DOCUMENT NO.		SHEET NO.
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE SHEET 2 & 4	SD-121050-008		3 OF 4
			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

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	± ---	± ---																							
		DRAWN BY: JMARSZALEK DATE: 2013/09/03	CHECKED BY: MSZWAJKOWSKI DATE: 2013/09/03	APPROVED BY: MIWASIECZKO DATE: 2015/09/28	TITLE E461XXXXXXXXXX FORM INDUSTRIAL																				
		MATERIAL NO. SEE TABLE 3	DOCUMENT NO. SD-121050-008			SHEET NO. 4 OF 4																			
		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																						
		SIZE A3																							