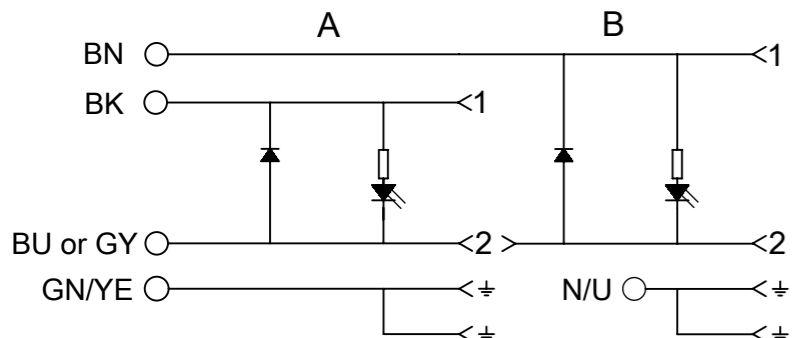
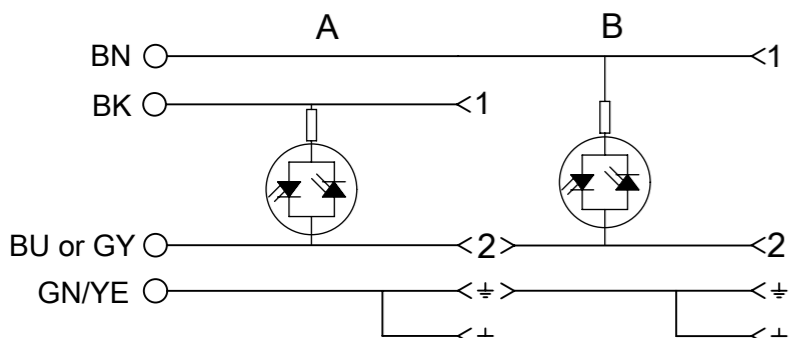


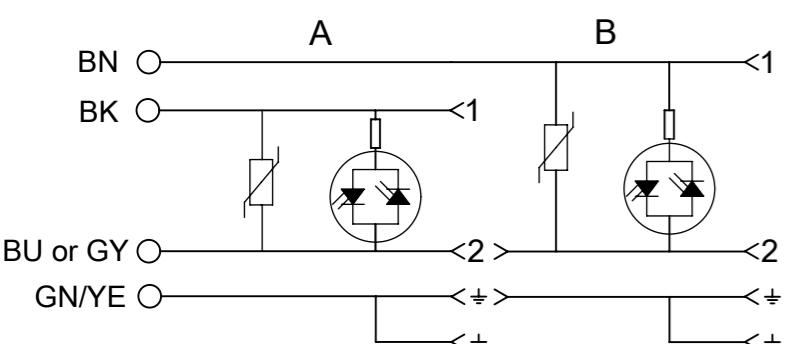
ELECTRICAL DIAGRAM - C3



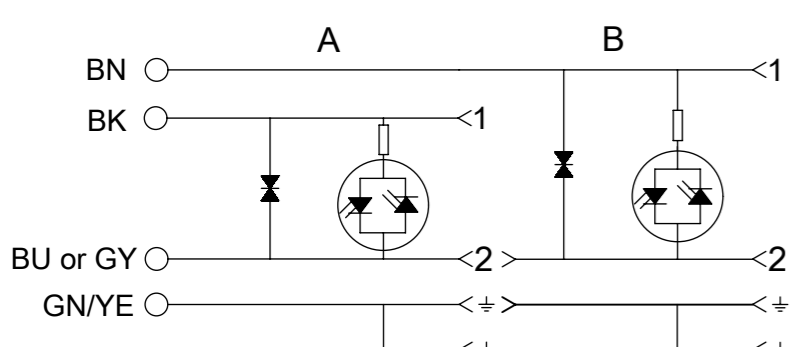
ELECTRICAL DIAGRAM - A1



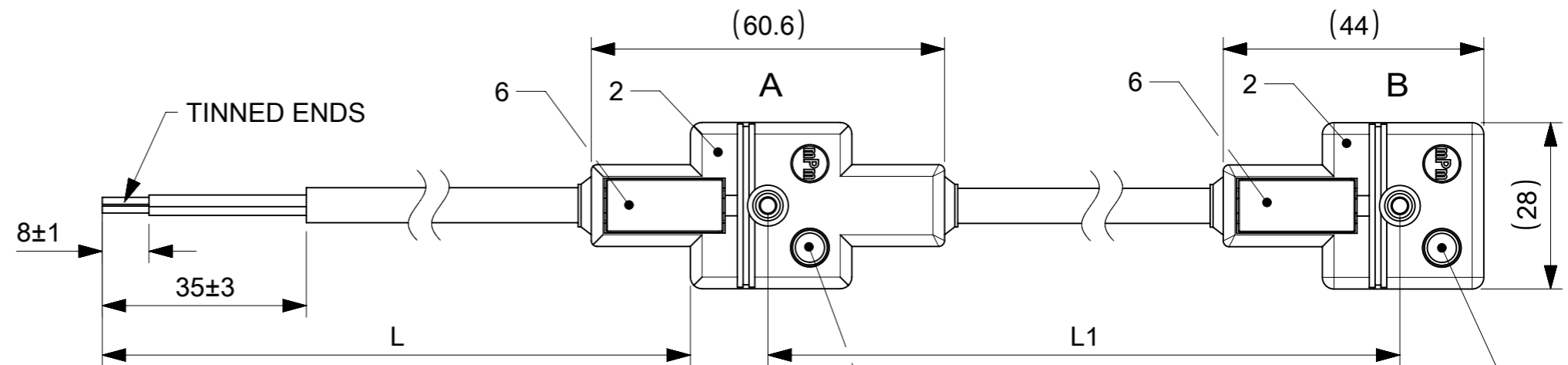
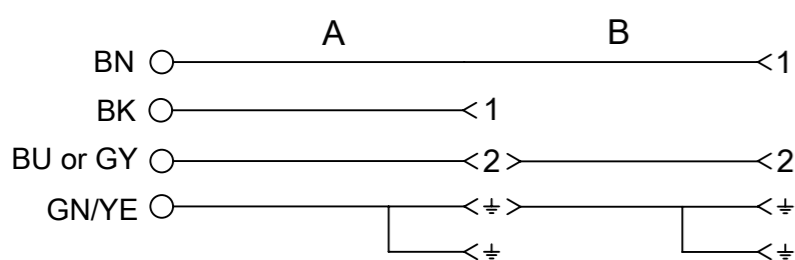
ELECTRICAL DIAGRAM - C4



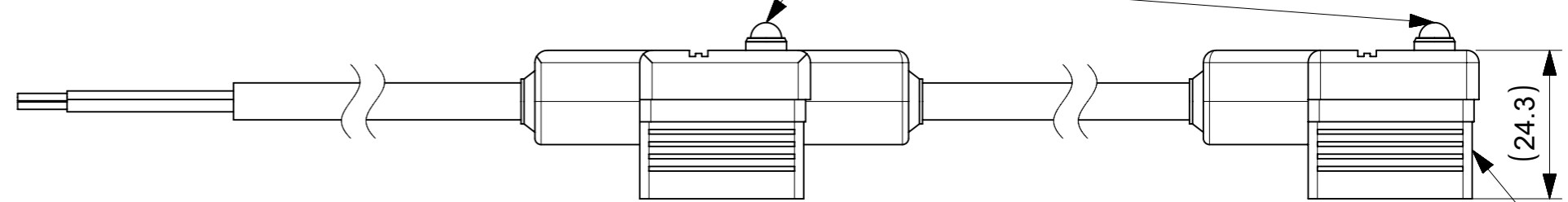
ELECTRICAL DIAGRAM - S0



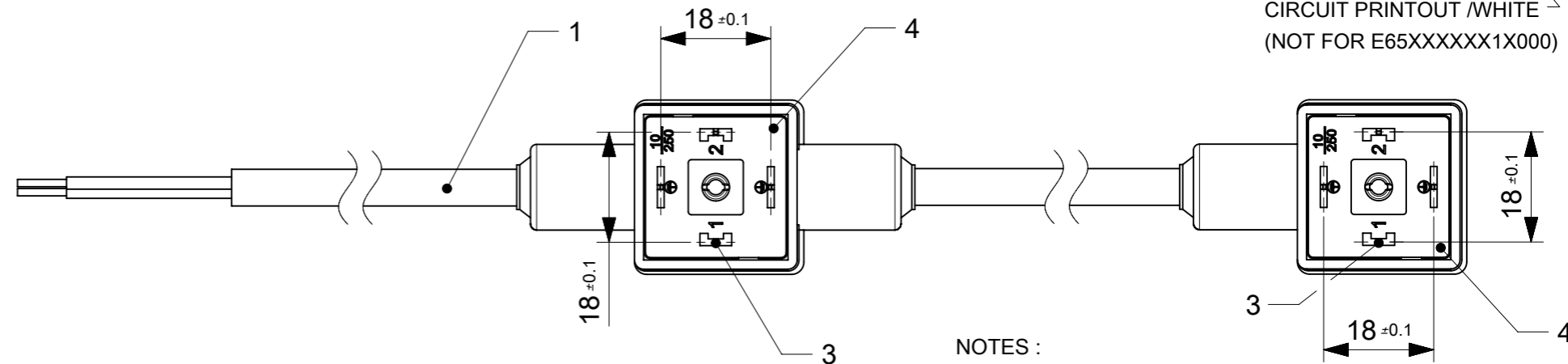
ELECTRICAL DIAGRAM - 00



IN CASE OF E65XXXXXXX1X000, WITHOUT LED



CIRCUIT PRINTOUT /WHITE (NOT FOR E65XXXXXXX1X000)



NOTES :

- ELECTRICAL - CURRENT : MAX. 5.0A
- CONTACT RESISTANCE : ≤15 milliohms MAX.
- INSULATION RESISTANCE : 100 Megaohms MIN.
- PHYSICAL - OPERATING TEMPERATURE WITH : NITRILE RUBBER (NBR) GASKET : -40°C TO +90°C
- LIVE CONTACT DISTANCE : FORM A - 18.00mm
- ENVIRONMENTAL - IP65 SEALING PROTECTION(FIXING SCREW)

BILL OF MATERIALS

| ITEM | QTY. | DESCRIPTION         | MATERIAL     | FINISH |
|------|------|---------------------|--------------|--------|
| 12   | 0/2  | INTEGRATED GASKET   | NBR          | -      |
| 11   | 0/2  | WASHER              | NBR          | -      |
| 10   | 0/2  | SCREW M3x27         | STEEL        | ZINC   |
| 9    | 0/2  | FLAT GASKET         | NBR/SILICONE | -      |
| 8    | 0/2  | PROFILE GASKET      | NBR/SILICONE | -      |
| 7    | 0/2  | SCREW M3x25         | STEEL        | ZINC   |
| 6    | 2    | LABEL WHITE         | ABS          | -      |
| 5    | 0/2  | PCB                 | -            | -      |
| 4    | 2    | INSERT DIN A        | PA66+25%G V0 | -      |
| 3    | 8    | CONTACT DIN         | BRASS        | SILVER |
| 2    | -    | MOULDING MATERIAL   | PP           | -      |
| 1    | -    | CABLE (SEE SHEET 3) | -            | -      |

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

|  |        |   |                |
|--|--------|---|----------------|
| DIMENSION UNITS                                      | SCALE  | CURRENT REV DESC: OBSOLETE PART NUMBERS |                |
| mm   | 1:1    |   |                |
| GENERAL TOLERANCES (UNLESS SPECIFIED)                |        |   |                |
| ANGULAR TOL  | ± 1.0° |   |                |
| 4 PLACES   | ±      | EC NO: 650268                           | 2020/10/29     |
| 3 PLACES   | ±      | DRWN: SUGEEB                            | 2020/12/18     |
| 2 PLACES   | ± 0.05 | CHK'D: GGA                              | 2020/12/18     |
| 1 PLACE  | ± 0.3  | APPR: GGA                               | 2020/12/18     |
| 0 PLACES   | ± 0.5  | INITIAL REVISION:                       |                |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |        | DRWN: SSM                               | 2020/07/31     |
| THIRD ANGLE PROJECTION                               |        | APPR: RSILLER                           | 2020/09/04     |
| DRAWING  | SERIES | MATERIAL NUMBER                         | CUSTOMER       |
| A3-SIZE  | 121055 | SEE SHEET 4                             | GENERAL MARKET |
| DOCUMENT NUMBER                                      |        | DOC TYPE                                | DOC PART       |
| 1210550038   |        | PSD                                     | 000            |
| REVISION   |        | SHEET NUMBER                            |                |
| A1   |        | 1 OF 4                                  |                |

# ENGINEERING No. MATRIX

**E 6 5 3 X X X X X X 1 X X X X**

E - Packing without bag  
W - Single Packing  
Q - Quick Packing

Number of Wires  
2 - 2 Poles  
3 - 2 Poles + Ground  
A - M12 STR , B - 90°

Cable type:  
See Table

Head Colour:  
G - Grey  
N - Black  
A - CSA-UL Black  
B - CSA-UL Grey

Cable Length in Meters (L):  
A=1  
B=1.5  
C=2  
D=2.5  
E=3  
F=3.5  
G=4  
H=4.5  
L=5  
M=5.5  
N=6  
P=6.5  
Q=7  
R=7.5  
S=8  
T=8.5  
U=9  
K=10

Cable Length in cm Between 2 connectors (L1)  
15=15 cm  
30=30 cm  
1K=100 cm  
min length=13 cm

Earth PIN Location:  
1=6/12 - earth on 6H/12H  
2=12/1 earth on 12H  
6=6/1 1 earth on 6H

Internal Circuit  
see Wiring Configuration

### Type of Gasket and Screw:

- 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

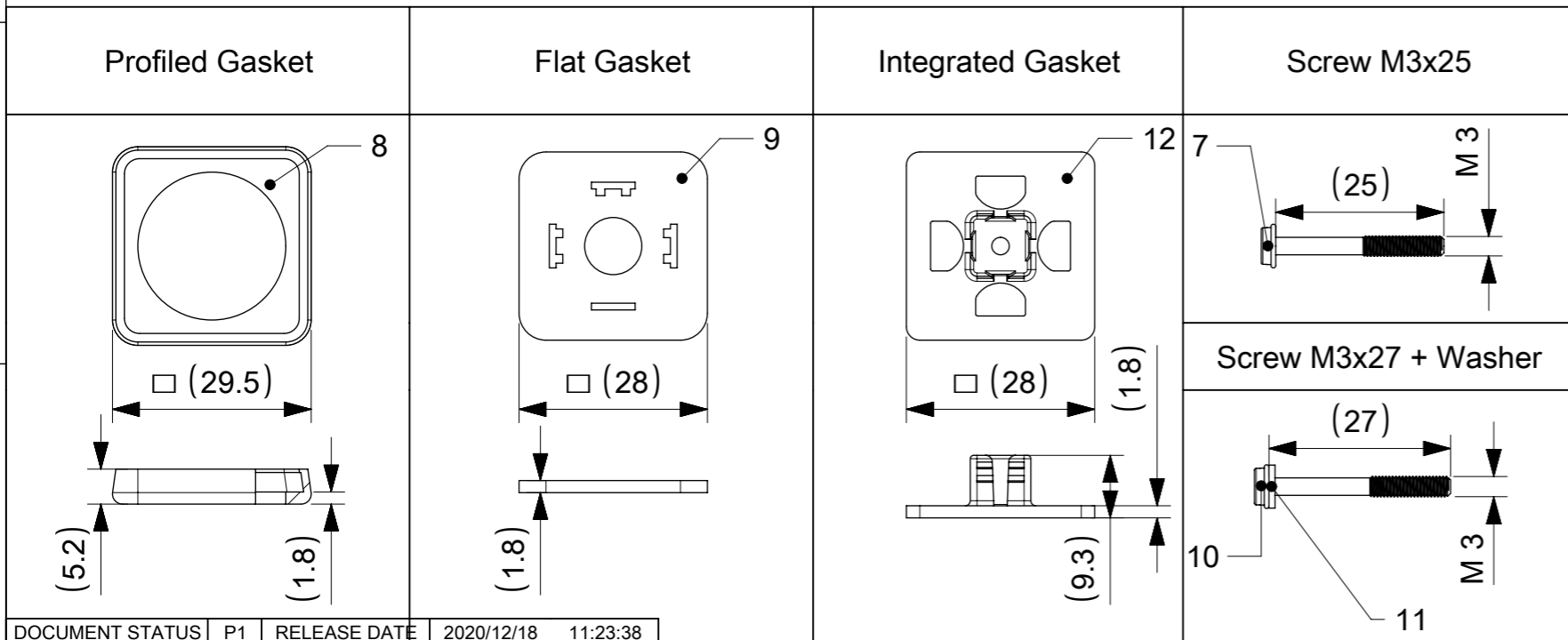
### Voltage and LED color

1= 12V  
2= 24V  
3= 48V  
4= 115V  
5= 230V  
**RED LED**

A= 12V  
B= 24V  
C= 48V  
D= 115V  
E= 230V  
**GREEN LED**

G= 12V  
H= 24V  
K= 48V  
L= 115V  
M= 230V  
**YELLOW LED**

## Type of Screws and Gaskets


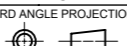


|   |  |   |  |                 |  |
|---|--|---|--|-----------------|--|
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  | CURRENT REV DESC: OBSOLETE PART NUMBERS |  | <b>molex</b>    |  |
| STANDARD E653 DIN FORM A  |  | PRODUCT CUSTOMER DRAWING                |  |                 |  |
| EC NO: 650268   |  | 2020/10/29                              |  | DOCUMENT NUMBER |  |
| DRWN: SUGEEB  |  | 2020/12/18                              |  | 1210550038      |  |
| CHK'D: GGA  |  | 2020/12/18                              |  | DOC TYPE        |  |
| APPR: GGA   |  | 2020/12/18                              |  | PSD             |  |
| INITIAL REVISION:   |  | 2020/07/31                              |  | DOC PART        |  |
| DRWN: SSM   |  | 2020/09/04                              |  | 000             |  |
| APPR: RSILLER   |  | 2020/09/04                              |  | A1              |  |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  |  | THIRD ANGLE PROJECTION                  |  | SHEET NUMBER    |  |
| DRAWING   |  | SERIES                                  |  | 2 OF 4          |  |
| A3-SIZE   |  | 121055                                  |  | MATERIAL NUMBER |  |
| SEE SHEET 4   |  | CUSTOMER                                |  | GENERAL MARKET  |  |

# TABLE 1 - CABLES

| mPm | Code | Wires | Cross Section        | Material             | Colour       | Diameter $\phi$ |
|-----|------|-------|----------------------|----------------------|--------------|-----------------|
| I   | 0    | 3     | 1 mm <sup>2</sup>    | PVC CEI 2022 II O.R. | Grey RAL7035 | 6.4±0.2 mm      |
| A   | 2    | 2     | 20 AWG               | PVC CSA/UL 2661      | Black        | 5.4±0.2 mm      |
| A   | 2    | 3     | 20 AWG               | PVC CSA/UL 2661      | Black        | 5.6±0.2 mm      |
| A   | 2    | 4     | 20 AWG               | PVC CSA/UL 2661      | Black        | 6.2±0.25 mm     |
| A   | 2    | 5     | 20 AWG               | PVC CSA/UL 2661      | Black        | 7±0.2 mm        |
| B   | 2    | 2     | 20 AWG               | PUR CSA/UL 20668     | Black        | 5.6±0.2 mm      |
| B   | 2    | 3     | 20 AWG               | PUR CSA/UL 20668     | Black        | 5.6±0.2 mm      |
| B   | 2    | 4     | 20 AWG               | PUR CSA/UL 20668     | Black        | 6.2±0.2 mm      |
| B   | 2    | 5     | 20 AWG               | PUR CSA/UL 20668     | Black        | 7±0.2 mm        |
| D   | 2    | 3     | 0.5 mm <sup>2</sup>  | PVC TI2 CEI 20-20    | Grey         | 5.5±0.2 mm      |
| F   | 2    | 3     | 0.5 mm <sup>2</sup>  | CNEOMO               | Grey RAL7000 | 5.5±0.2 mm      |
| I   | 2    | 2     | 0.5 mm <sup>2</sup>  | PVC CEI 2022 II O.R. | Grey RAL7035 | 5.5+0.3/-0 mm   |
| I   | 2    | 3     | 0.5 mm <sup>2</sup>  | PVC CEI 2022 II O.R. | Grey RAL7035 | 5.5+0.3/-0 mm   |
| I   | 2    | 4     | 0.5 mm <sup>2</sup>  | PVC CEI 2022 II O.R. | Grey RAL7035 | 6.5±0.2 mm      |
| I   | 2    | 5     | 0.5 mm <sup>2</sup>  | PVC CEI 2022 II O.R. | Grey RAL7035 | 7±0.2 mm        |
| N   | 2    | 2     | 0.5 mm <sup>2</sup>  | PVCH03               | Black        | 5.2±0.2 mm      |
| N   | 2    | 3     | 0.5 mm <sup>2</sup>  | PVCH03               | Black        | 5.5±0.2 mm      |
| N   | 2    | 4     | 0.5 mm <sup>2</sup>  | PVCH03               | Black        | 6.9 mm max      |
| P   | 2    | 2     | 0.5 mm <sup>2</sup>  | PUR-BLEND            | Black        | 5.5±0.2 mm      |
| P   | 2    | 3     | 0.5 mm <sup>2</sup>  | PUR-BLEND            | Black        | 5.5+0.3/-0 mm   |
| P   | 2    | 4     | 0.5 mm <sup>2</sup>  | PUR-BLEND            | Black        | 6.5±0.2 mm      |
| P   | 2    | 5     | 0.5 mm <sup>2</sup>  | PUR-BLEND            | Black        | 7+0.3/-0.1 mm   |
| A   | 3    | 2     | 18 AWG               | PVC CSA/UL 2661      | Black        | 6.5±0.25 mm     |
| A   | 3    | 3     | 18 AWG               | PVC CSA/UL 2661      | Black        | 6.5±0.25 mm     |
| A   | 3    | 4     | 18 AWG               | PVC CSA/UL 2661      | Black        | 7±0.3 mm        |
| A   | 3    | 5     | 18 AWG               | PVC CSA/UL 2661      | Black        | 7.8±0.25 mm     |
| B   | 3    | 2     | 18 AWG               | PUR CSA/UL 20668     | Black        | 6.8±0.2 mm      |
| B   | 3    | 3     | 18 AWG               | PUR CSA/UL 20668     | Black        | 6.5±0.2 mm      |
| B   | 3    | 4     | 18 AWG               | PUR CSA/UL 20668     | Black        | 7±0.2 mm        |
| B   | 3    | 5     | 18 AWG               | PUR CSA/UL 20668     | Black        | 7.8±0.2 mm      |
| D   | 3    | 3     | 0.75 mm <sup>2</sup> | PVC TI2 CEI 20-20    | Grey         | 6.5±0.2 mm      |
| D   | 3    | 4     | 0.75 mm <sup>2</sup> | PVC TI2 CEI 20-20    | Grey         | 7.1±0.2 mm      |
| I   | 3    | 2     | 0.75 mm <sup>2</sup> | PVC CEI 2022 II O.R. | Grey RAL7001 | 5.5±0.2 mm      |
| I   | 3    | 3     | 0.75 mm <sup>2</sup> | PVC CEI 2022 II O.R. | Grey RAL7035 | 6±0.2 mm        |
| I   | 3    | 4     | 0.75 mm <sup>2</sup> | PVC CEI 2022 II O.R. | Grey RAL7035 | 7±0.2 mm        |
| N   | 3    | 2     | 0.75 mm <sup>2</sup> | PVCH05               | Black        | 6.2±0.2 mm      |
| N   | 3    | 3     | 0.75 mm <sup>2</sup> | PVCH05               | Black        | 6.5±0.2 mm      |
| N   | 3    | 4     | 0.75 mm <sup>2</sup> | PVCH05               | Black        | 7.1±0.2 mm      |
| N   | 3    | 5     | 0.75 mm <sup>2</sup> | PVCH05               | Black        | 8.0+0.2/-0 mm   |
| P   | 3    | 2     | 0.75 mm <sup>2</sup> | PUR-BLEND            | Black        | 6.5±0.2 mm      |

| mPm | Code | Wires | Cross Section        | Material             | Colour       | Diameter $\phi$ |
|-----|------|-------|----------------------|----------------------|--------------|-----------------|
| P   | 3    | 3     | 0.75 mm <sup>2</sup> | PUR-BLEND            | Black        | 6.5±0.2 mm      |
| P   | 3    | 4     | 0.75 mm <sup>2</sup> | PUR-BLEND            | Black        | 7±0.2 mm        |
| R   | 3    | 3     | 0.75 mm <sup>2</sup> | TPR HAL. FREE        | Black        | 6.5±0.2 mm      |
| T   | 3    | 3     | 0.75 mm <sup>2</sup> | PUR CSA/UL           | Yellow       | 6.5±0.2 mm      |
| Y   | 3    | 3     | 0.75 mm <sup>2</sup> | SIL/0300             | Red          | 6.5±0.2 mm      |
| F   | 4    | 3     | 1 mm <sup>2</sup>    | CNEOMO               | Grey RAL7000 | 7.1+0.2/-0 mm   |
| F   | 4    | 4     | 1 mm <sup>2</sup>    | CNEOMO               | Grey RAL7000 | 7.1+0.2/-0 mm   |
| I   | 4    | 2     | 1 mm <sup>2</sup>    | PVC CEI 2022 II O.R. | Grey RAL7035 | 7.1+0.2/-0 mm   |
| I   | 4    | 3     | 1 mm <sup>2</sup>    | PVC CEI 2022 II O.R. | Grey RAL7035 | 7.1+0.2/-0 mm   |
| N   | 4    | 2     | 1 mm <sup>2</sup>    | PVCH05               | Black        | 6.5±0.2 mm      |
| N   | 4    | 3     | 1 mm <sup>2</sup>    | PVCH05               | Black        | 6.9±0.2 mm      |
| R   | 4    | 3     | 1 mm <sup>2</sup>    | TPR HAL. FREE        | Black        | 7.1±0.2 mm      |
| N   | 5    | 3     | 1.5 mm <sup>2</sup>  | PVCH05               | Black        | 8.3+0.2/-0 mm   |
| I   | 6    | 2     | 0.35 mm <sup>2</sup> | PVC CEI 2022 II O.R. | Grey RAL7035 | 4.8±0.2 mm      |
| A   | 7    | 3     | 20 AWG               | PVC CSA/UL 2661      | Yellow       | 5.6±0.2 mm      |
| I   | 9    | 4     | 0.75 mm <sup>2</sup> | PVC CEI 2022 II O.R. | Grey RAL7035 | 7.3±0.2 mm      |

|   |        |   |  |          |  |                 |  |                |  |
|---|--------|---|--|----------|--|-----------------|--|----------------|--|
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |        |   |  |          |  |                 |  |                |  |
| DIMENSION UNITS   | SCALE  | CURRENT REV DESC: OBSOLETE PART NUMBERS   |  |          |  |                 |  |                |  |
| mm  | 1:1    |      |  |          |  |                 |  |                |  |
| GENERAL TOLERANCES (UNLESS SPECIFIED)   |        |   |  |          |  |                 |  |                |  |
| ANGULAR TOL   | ± 1.0° | STANDARD E653 DIN FORM A  |  |          |  |                 |  |                |  |
| 4 PLACES  | ±      | PRODUCT CUSTOMER DRAWING  |  |          |  |                 |  |                |  |
| 3 PLACES  | ±      | EC NO: 650268<br>DRWN: SUGEEB 2020/10/29<br>CHK'D: GGA 2020/12/18<br>APPR: GGA 2020/12/18 |  |          |  |                 |  |                |  |
| 2 PLACES  | ± 0.05 | INITIAL REVISION:   |  |          |  |                 |  |                |  |
| 1 PLACE   | ± 0.3  | DRWN: SSM 2020/07/31<br>APPR: RSILLER 2020/09/04  |  |          |  |                 |  |                |  |
| 0 PLACES  | ± 0.5  | DOCUMENT NUMBER   |  | DOC TYPE |  | DOC PART        |  | REVISION       |  |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  |        | 1210550038  |  | PSD      |  | 000             |  | A1             |  |
| THIRD ANGLE PROJECTION  |        | DRAWING   |  | SERIES   |  | MATERIAL NUMBER |  | CUSTOMER       |  |
|    |        | A3-SIZE   |  | 121055   |  | SEE SHEET 4     |  | GENERAL MARKET |  |
|   |        |   |  |          |  |                 |  | SHEET NUMBER   |  |
|   |        |   |  |          |  |                 |  | 3 OF 4         |  |



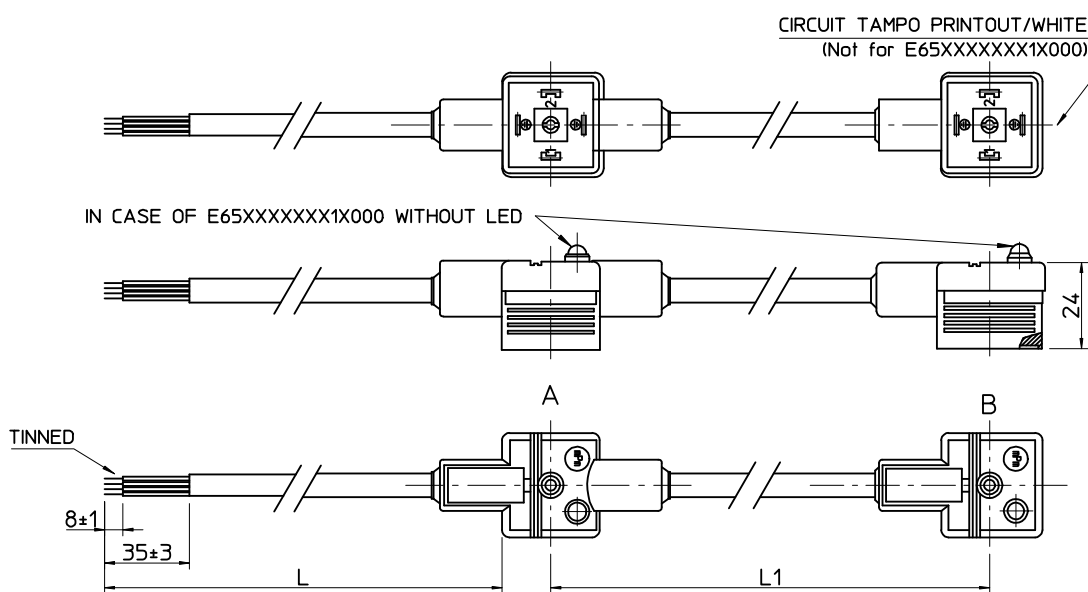
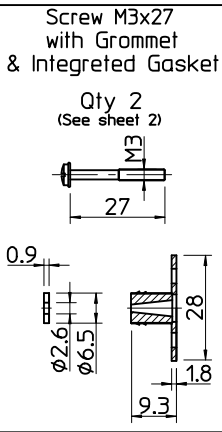
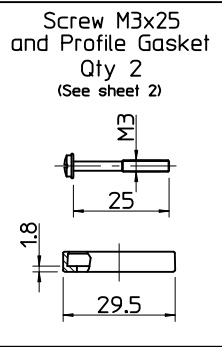
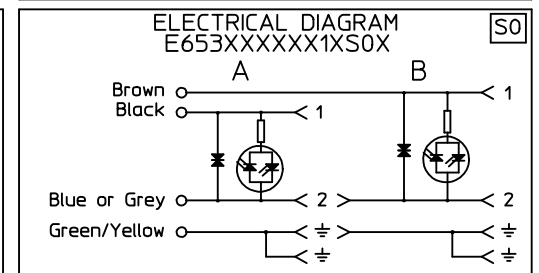
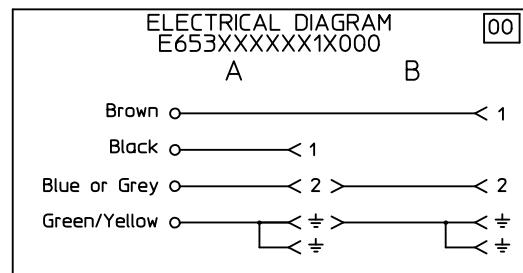
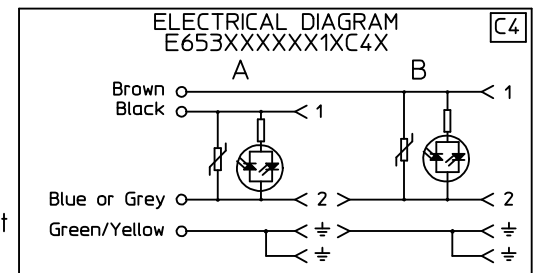
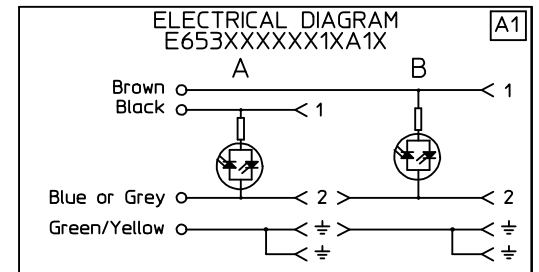
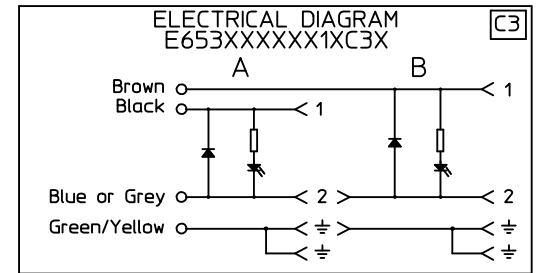


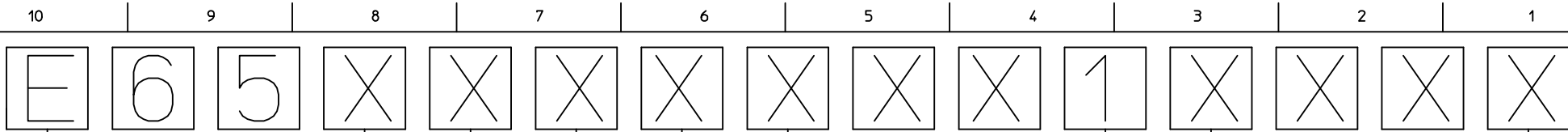
Table of length tolerances [mm]

| 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    |

NOTE: Ground on schematics does not apply to E652XXXXXX1XXXX



|   |  |  |            |                                    |            |               |   |                               |
|---|--|--|------------|------------------------------------|------------|---------------|---|-------------------------------|
| <p>DRAWING UPDATE<br/>EC NO: IPG2013-1505<br/>DRWIN: JMARSZALEK 2013/03/28<br/>CHKD: MIWASIECZKO<br/>APPR: MIWASIECZKO 2013/04/02</p> | <p>QUALITY SYMBOLS<br/>▽=0<br/>◻=0</p> | <p>GENERAL TOLERANCES (UNLESS SPECIFIED)</p> |            | <p>DIMENSION STYLE<br/>MM ONLY</p> |            | SCALE         | DESIGN UNITS                              | <p>FIRST ANGLE PROJECTION</p> |
|   |  | mm   | INCH       | DRAWN BY                           | DATE       | TITLE         | <p>E65XXXXXX1XXXX<br/>DUAL DIN FORM A</p> |                               |
|   |  | 4 PLACES ± --- ± ---                         |            | JMARSZALEK                         | 2013/01/16 |               |   |                               |
|   |  | 3 PLACES ± --- ± ---                         |            | CHECKED BY                         | DATE       |               |   |                               |
| 2 PLACES ± --- ± ---  |  | MSZWAJKOWSKI                                 | 2013/01/16 |                                    |            |               |   |                               |
| 1 PLACE ± --- ± ---   |  | APPROVED BY                                  | DATE       |                                    |            |               |   |                               |
| 0 PLACE ± --- ± ---   |  | MIWASIECZKO                                  | 2013/02/12 |                                    |            |               |   |                               |
|   |  | ANGULAR ± --- °                              |            | MATERIAL NO.                       |            | DOCUMENT NO.  |   |                               |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  |  |  |            | SEE SHEET 2&3                      |            | SD-121055-001 |   | SHEET NO.<br>1 OF 4           |
| <p>THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</p>  |  |  |            |                                    |            |               |   |                               |



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

NUMBER OF WIRES:  
 2=2 POLES  
 3=2 POLES+GROUND

CABLE TYPE  
 SEE TABLE 1

CABLE CROSS SECTION AREA  
 SEE TABLE 2

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

CABLE LENGTH IN CM BETWIN 2 MOULDINGS (L1)  
 Eg.:050=50 CM, 300=300 CM, 10K=1000 CM

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

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 (M3x27 mm).  
 R=INTAGRATED 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

CABLE LENGHT IN METERS (L)  
 A=1  
 B=1,5  
 C=2  
 D=2,5  
 E=3  
 F=3,5  
 G=4  
 H=4,5  
 L=5  
 M=5,5  
 N=6  
 P=6,5  
 Q=7  
 R=7,5  
 S=8  
 T=8,5  
 U=9  
 K=10

| <b>DRAWING UPDATE</b><br>EC NO: IPG2013-1505<br>DRWN: JMARSZALEK 2013/03/28<br>CHKD:<br>APPR: MIWASIECZKO 2013/04/02 | QUALITY SYMBOLS   | GENERAL TOLERANCES (UNLESS SPECIFIED)   | DIMENSION STYLE<br><b>MM ONLY</b> | SCALE<br><b>1:1</b> | DESIGN UNITS<br><b>METRIC</b> | FIRST ANGLE PROJECTION |       |       |          |       |       |          |       |       |         |       |       |         |       |       |  |          |      |       |            |            |                                     |            |      |              |            |              |             |      |             |            |                            |                     |
|--|---|---|-----------------------------------|---------------------|-------------------------------|------------------------|-------|-------|----------|-------|-------|----------|-------|-------|---------|-------|-------|---------|-------|-------|--|----------|------|-------|------------|------------|-------------------------------------|------------|------|--------------|------------|--------------|-------------|------|-------------|------------|----------------------------|---------------------|
|  | =0<br>=0  | <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 | ± --- | ± --- | <table border="1"> <thead> <tr> <th>DRAWN BY</th> <th>DATE</th> <th>TITLE</th> </tr> </thead> <tbody> <tr> <td>JMARSZALEK</td> <td>2013/01/16</td> <td rowspan="2">E65XXXXXXXX1XXXX<br/>DUAL DIN FORM A</td> </tr> <tr> <td>CHECKED BY</td> <td>DATE</td> </tr> <tr> <td>MSZWAJKOWSKI</td> <td>2013/01/16</td> <td rowspan="2"><b>molex</b></td> </tr> <tr> <td>APPROVED BY</td> <td>DATE</td> </tr> <tr> <td>MIWASIECZKO</td> <td>2013/02/12</td> <td>DOCUMENT NO. SD-121055-001</td> </tr> </tbody> </table> | DRAWN BY | DATE | TITLE | JMARSZALEK | 2013/01/16 | E65XXXXXXXX1XXXX<br>DUAL DIN FORM A | CHECKED BY | DATE | MSZWAJKOWSKI | 2013/01/16 | <b>molex</b> | APPROVED BY | DATE | MIWASIECZKO | 2013/02/12 | DOCUMENT NO. SD-121055-001 | SHEET NO.<br>2 OF 4 |
|  |   | mm  | INCH                              |                     |                               |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |  |          |      |       |            |            |                                     |            |      |              |            |              |             |      |             |            |                            |                     |
|  | 4 PLACES  | ± ---   | ± ---                             |                     |                               |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |  |          |      |       |            |            |                                     |            |      |              |            |              |             |      |             |            |                            |                     |
|  | 3 PLACES  | ± ---   | ± ---                             |                     |                               |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |  |          |      |       |            |            |                                     |            |      |              |            |              |             |      |             |            |                            |                     |
| 2 PLACES   | ± ---   | ± ---   |                                   |                     |                               |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |  |          |      |       |            |            |                                     |            |      |              |            |              |             |      |             |            |                            |                     |
| 1 PLACE  | ± ---   | ± ---   |                                   |                     |                               |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |  |          |      |       |            |            |                                     |            |      |              |            |              |             |      |             |            |                            |                     |
| 0 PLACE  | ± ---   | ± ---   |                                   |                     |                               |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |  |          |      |       |            |            |                                     |            |      |              |            |              |             |      |             |            |                            |                     |
| DRAWN BY   | DATE  | TITLE   |                                   |                     |                               |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |  |          |      |       |            |            |                                     |            |      |              |            |              |             |      |             |            |                            |                     |
| JMARSZALEK   | 2013/01/16  | E65XXXXXXXX1XXXX<br>DUAL DIN FORM A   |                                   |                     |                               |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |  |          |      |       |            |            |                                     |            |      |              |            |              |             |      |             |            |                            |                     |
| CHECKED BY   | DATE  |   |                                   |                     |                               |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |  |          |      |       |            |            |                                     |            |      |              |            |              |             |      |             |            |                            |                     |
| MSZWAJKOWSKI   | 2013/01/16  | <b>molex</b>  |                                   |                     |                               |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |  |          |      |       |            |            |                                     |            |      |              |            |              |             |      |             |            |                            |                     |
| APPROVED BY  | DATE  |   |                                   |                     |                               |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |  |          |      |       |            |            |                                     |            |      |              |            |              |             |      |             |            |                            |                     |
| MIWASIECZKO  | 2013/02/12  | DOCUMENT NO. SD-121055-001  |                                   |                     |                               |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |  |          |      |       |            |            |                                     |            |      |              |            |              |             |      |             |            |                            |                     |
| MATERIAL NO.<br><b>SEE SHEET 2&amp;3</b>   | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |   |                                   |                     |                               |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |  |          |      |       |            |            |                                     |            |      |              |            |              |             |      |             |            |                            |                     |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS   |   |   |                                   |                     |                               |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |  |          |      |       |            |            |                                     |            |      |              |            |              |             |      |             |            |                            |                     |

TABLE 2 - CABLES

| Mollex 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.     | -     |
| 1202098206 | 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

| Mollex 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<br>0,75 mm2 = 21 x 0,20<br>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<br>0,75 mm2 = 42 x 0,15<br>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<br>0,75 mm2 = 42 x 0,15<br>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<br>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<br>18 AWG = 52 x 0,15                         |

DRAWING UPDATE  
EC NO: IPG2013-1505  
DRWN: JMARSZALEK 2013/03/28  
CHKD:  
APPR: MIWASIECZKO 2013/04/02

QUALITY SYMBOLS  
▽=0  
◻=0

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   | 2013/01/16 |
| CHECKED BY   | DATE       |
| MSZWAJKOWSKI | 2013/01/16 |
| APPROVED BY  | DATE       |
| MIWASIECZKO  | 2013/02/12 |

MATERIAL NO.  
SEE SHEET 2&3

SCALE 1:1  
DESIGN UNITS METRIC  
FIRST ANGLE PROJECTION

TITLE  
E65XXXXXXXX1XXXX  
DUAL DIN FORM A

**molex**

DOCUMENT NO. SD-121055-001  
SHEET NO. 3 OF 4

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION





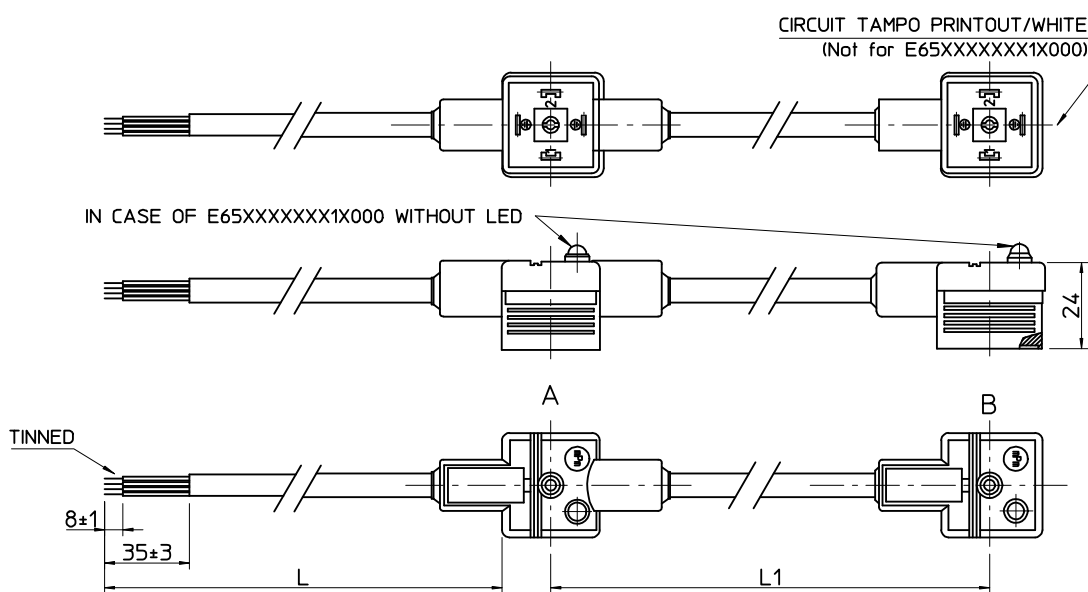
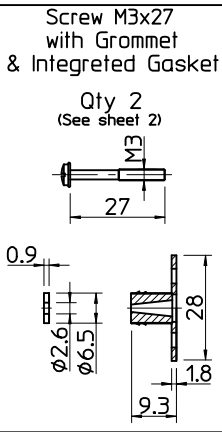
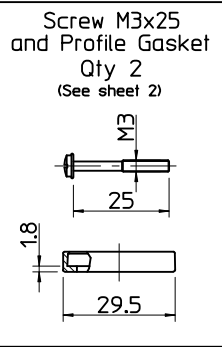
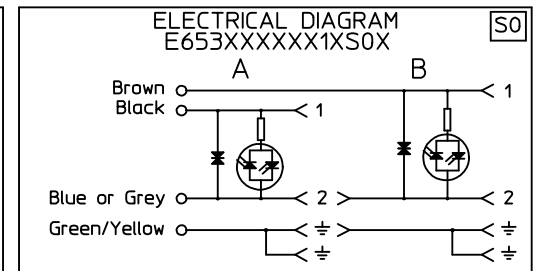
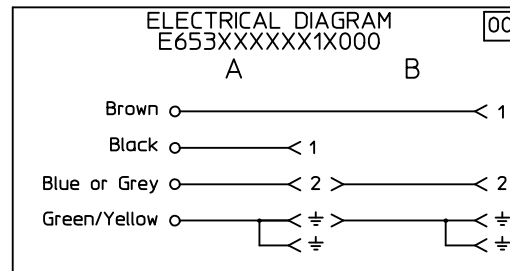
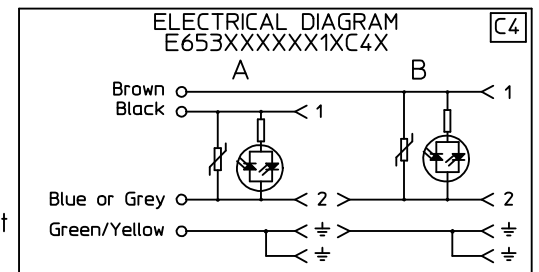
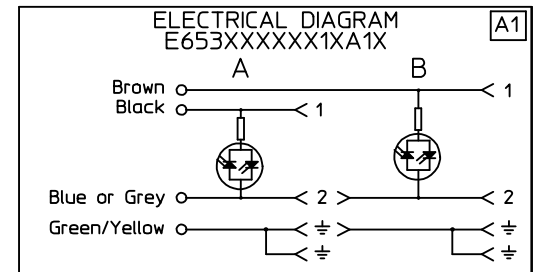
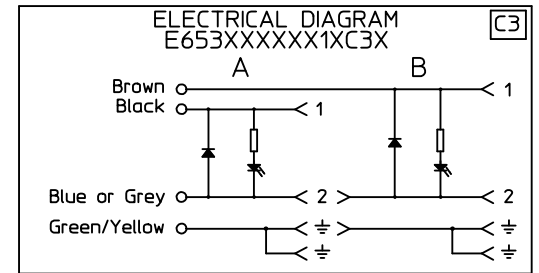


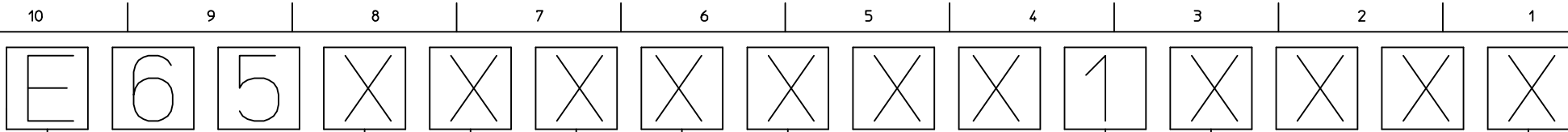
Table of length tolerances [mm]

| 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    |

NOTE: Ground on schematics does not apply to E652XXXXXX1XXXX



|   |  |  |            |                                    |            |               |   |                               |
|---|--|--|------------|------------------------------------|------------|---------------|---|-------------------------------|
| <p>DRAWING UPDATE<br/>EC NO: IPG2013-1505<br/>DRWIN: JMARSZALEK 2013/03/28<br/>CHKD: MIWASIECZKO<br/>APPR: MIWASIECZKO 2013/04/02</p> | <p>QUALITY SYMBOLS<br/>▽=0<br/>◻=0</p> | <p>GENERAL TOLERANCES (UNLESS SPECIFIED)</p> |            | <p>DIMENSION STYLE<br/>MM ONLY</p> |            | SCALE         | DESIGN UNITS                              | <p>FIRST ANGLE PROJECTION</p> |
|   |  | mm   | INCH       | DRAWN BY                           | DATE       | TITLE         | <p>E65XXXXXX1XXXX<br/>DUAL DIN FORM A</p> |                               |
|   |  | 4 PLACES ± --- ± ---                         |            | JMARSZALEK                         | 2013/01/16 |               |   |                               |
|   |  | 3 PLACES ± --- ± ---                         |            | CHECKED BY                         | DATE       |               |   |                               |
| 2 PLACES ± --- ± ---  |  | MSZWAJKOWSKI                                 | 2013/01/16 |                                    |            |               |   |                               |
| 1 PLACE ± --- ± ---   |  | APPROVED BY                                  | DATE       |                                    |            |               |   |                               |
| 0 PLACE ± --- ± ---   |  | MIWASIECZKO                                  | 2013/02/12 |                                    |            |               |   |                               |
|   |  | ANGULAR ± --- °                              |            | MATERIAL NO.                       |            | DOCUMENT NO.  |   |                               |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  |  |  |            | SEE SHEET 2&3                      |            | SD-121055-001 |   | SHEET NO.<br>1 OF 4           |
| <p>THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</p>  |  |  |            |                                    |            |               |   |                               |



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

NUMBER OF WIRES:  
 2=2 POLES  
 3=2 POLES+GROUND

CABLE TYPE  
 SEE TABLE 1

CABLE CROSS SECTION AREA  
 SEE TABLE 2

HEAD COLOUR:

G=GREY  
 N=BLACK  
 T=TRANSPARENT  
 A=CSA-UL BLACK  
 B=CSA-UL GREY

CABLE LENGTH IN CM BETWIN 2 MOULDINGS (L1)  
 Eg.:050=50 CM, 300=300 CM, 10K=1000 CM

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

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 (M3x27 mm).  
 R=INTAGRATED 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

CABLE LENGHT IN METERS (L)

A=1  
 B=1,5  
 C=2  
 D=2,5  
 E=3  
 F=3,5  
 G=4  
 H=4,5  
 L=5  
 M=5,5  
 N=6  
 P=6,5  
 Q=7  
 R=7,5  
 S=8  
 T=8,5  
 U=9  
 K=10

| <b>DRAWING UPDATE</b><br>EC NO: IPG2013-1505<br>DRWN: JMARSZALEK 2013/03/28<br>CHKD:<br>APPR: MIWASIECZKO 2013/04/02 | DESCRIPTION<br>REV | QUALITY SYMBOLS   | GENERAL TOLERANCES (UNLESS SPECIFIED)   | DIMENSION STYLE<br>MM ONLY | SCALE<br>1:1 | DESIGN UNITS<br>METRIC | FIRST ANGLE PROJECTION |       |       |          |       |       |          |       |       |         |       |       |         |       |       |   |          |      |            |            |            |      |              |            |             |      |             |            |       |                                     |  |  |
|--|--------------------|---|---|----------------------------|--------------|------------------------|------------------------|-------|-------|----------|-------|-------|----------|-------|-------|---------|-------|-------|---------|-------|-------|---|----------|------|------------|------------|------------|------|--------------|------------|-------------|------|-------------|------------|-------|-------------------------------------|--|--|
|  |                    | =0<br>=0  | <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 | ± --- | ± --- | <table border="1"> <tr> <td>DRAWN BY</td> <td>DATE</td> </tr> <tr> <td>JMARSZALEK</td> <td>2013/01/16</td> </tr> <tr> <td>CHECKED BY</td> <td>DATE</td> </tr> <tr> <td>MSZWAJKOWSKI</td> <td>2013/01/16</td> </tr> <tr> <td>APPROVED BY</td> <td>DATE</td> </tr> <tr> <td>MIWASIECZKO</td> <td>2013/02/12</td> </tr> </table> | DRAWN BY | DATE | JMARSZALEK | 2013/01/16 | CHECKED BY | DATE | MSZWAJKOWSKI | 2013/01/16 | APPROVED BY | DATE | MIWASIECZKO | 2013/02/12 | TITLE | E65XXXXXXXX1XXXX<br>DUAL DIN FORM A |  |  |
|  |                    |   | mm  | INCH                       |              |                        |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |   |          |      |            |            |            |      |              |            |             |      |             |            |       |                                     |  |  |
|  |                    | 4 PLACES  | ± ---   | ± ---                      |              |                        |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |   |          |      |            |            |            |      |              |            |             |      |             |            |       |                                     |  |  |
|  |                    | 3 PLACES  | ± ---   | ± ---                      |              |                        |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |   |          |      |            |            |            |      |              |            |             |      |             |            |       |                                     |  |  |
| 2 PLACES   | ± ---              | ± ---   |   |                            |              |                        |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |   |          |      |            |            |            |      |              |            |             |      |             |            |       |                                     |  |  |
| 1 PLACE  | ± ---              | ± ---   |   |                            |              |                        |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |   |          |      |            |            |            |      |              |            |             |      |             |            |       |                                     |  |  |
| 0 PLACE  | ± ---              | ± ---   |   |                            |              |                        |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |   |          |      |            |            |            |      |              |            |             |      |             |            |       |                                     |  |  |
| DRAWN BY   | DATE               |   |   |                            |              |                        |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |   |          |      |            |            |            |      |              |            |             |      |             |            |       |                                     |  |  |
| JMARSZALEK   | 2013/01/16         |   |   |                            |              |                        |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |   |          |      |            |            |            |      |              |            |             |      |             |            |       |                                     |  |  |
| CHECKED BY   | DATE               |   |   |                            |              |                        |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |   |          |      |            |            |            |      |              |            |             |      |             |            |       |                                     |  |  |
| MSZWAJKOWSKI   | 2013/01/16         |   |   |                            |              |                        |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |   |          |      |            |            |            |      |              |            |             |      |             |            |       |                                     |  |  |
| APPROVED BY  | DATE               |   |   |                            |              |                        |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |   |          |      |            |            |            |      |              |            |             |      |             |            |       |                                     |  |  |
| MIWASIECZKO  | 2013/02/12         |   |   |                            |              |                        |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |   |          |      |            |            |            |      |              |            |             |      |             |            |       |                                     |  |  |
| ANGULAR ±---°  | SEE SHEET 2&3      | MATERIAL NO.  | DOCUMENT NO.  |                            | SHEET NO.    |                        |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |   |          |      |            |            |            |      |              |            |             |      |             |            |       |                                     |  |  |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS   | SIZE<br>A3         | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |   |                            |              |                        |                        |       |       |          |       |       |          |       |       |         |       |       |         |       |       |   |          |      |            |            |            |      |              |            |             |      |             |            |       |                                     |  |  |

TABLE 2 - CABLES

| Mollex 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.     | -     |
| 1202098206 | 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

| Mollex 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<br>0,75 mm2 = 21 x 0,20<br>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<br>0,75 mm2 = 42 x 0,15<br>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<br>0,75 mm2 = 42 x 0,15<br>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<br>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<br>18 AWG = 52 x 0,15                         |

DRAWING UPDATE  
EC NO: IPG2013-1505  
DRWN: JMARSZALEK 2013/03/28  
CHKD:  
APPR: MIWASIECZKO 2013/04/02

QUALITY SYMBOLS  
▽=0  
◻=0

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   | 2013/01/16 |
| CHECKED BY   | DATE       |
| MSZWAJKOWSKI | 2013/01/16 |
| APPROVED BY  | DATE       |
| MIWASIECZKO  | 2013/02/12 |

MATERIAL NO.  
SEE SHEET 2&3

SCALE 1:1  
DESIGN UNITS METRIC  
FIRST ANGLE PROJECTION

TITLE  
E65XXXXXXXX1XXXX  
DUAL DIN FORM A

**molex**

DOCUMENT NO. SD-121055-001  
SHEET NO. 3 OF 4

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

