

ENGINEERING NO. - NUMERICAL CODE (Available parts see PART LIST table. Others on request).

E652 XX XXXX 1 XXXX

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

Cable type:
See Table 1

Cable Cross Section Aera:
See Table 1

Head Color:
G=Grey
N=Black
T=Transparent
A=CSA-UL Black
B=CSA-UL Grey

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

Cable Lenght
in cm Betewen
2 Mouldings (L1)
Eg.: 15=15 cm
30=30 cm
1K=100 cm
min lenght=13 cm

Earth PIN Location:
1=Double Earth on
6H and 12H

Internal Circuit
Wiring Configuration
Eg.: C4, 00, S0
See Sheet 1

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 Gasket and Screw:

- 1=NBR Profile Gasket + Fixing Screw (M3x25 mm)
- 2=NBR Flat Gasket + Fixing Screw (M3x25 mm)
- 3=Silicone Profile Gasket + Fixing Screw (M3x25 mm)
- 4=Silicone Flat Gasket + Fixing Screw (M3x25 mm)
- P=Integrated Gasket Assembled + Fixing Screw with Washer Assembled (M3x27 mm)
- R=Integrated Gasket + Fixing Screw + Washer (M3x27 mm)
- T=Profile Gasket + Fixing Screw + Washer (M3x27 mm)

Profile Gasket +
Screw M3x25 mm

Flat Gasket +
Screw M3x25 mm

Profile Gasket +
Screw with Washer M3x27 mm

Integrated Gasket +
Screw with Washer M3x27 mm

FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC: TOL. TABLE UPDATED			
	DIMENSION UNITS	SCALE				
$\frac{E}{A} = 0$	mm	1:1				
$\frac{E}{E} = 0$	GENERAL TOLERANCES (UNLESS SPECIFIED)					
$\frac{E}{E} = 0$	ANGULAR TOL ± 1.0 °					
DIVISIONAL SYMBOLS	4 PLACES	±				
	3 PLACES	±				
	2 PLACES	± 0.05				
	1 PLACE	± 0.3				
	0 PLACES	± 0.5				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			THIRD ANGLE PROJECTION	DRAWING	SERIES	
				A3-SIZE	121055	
					MATERIAL NUMBER	CUSTOMER
					SEE SHEET 3	GENERAL MARKET
					DOC TYPE	DOC PART
					PSD	000
					REVISION	A1
					SHEET NUMBER	
					2 OF 3	

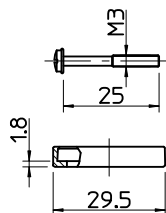
1		9		8		7		6		5		4		3		2		1	
TABLE 1 - CABLES																			
Molex PN	mPm	Code	Wires	Cross Section	Material	Colour	Diameter $\varnothing$												
1210180080	I	0	3	1 mm²	PVC CEI 2022 II O.R.	Grey RAL7035	6.4±0.2 mm												
1210180467	A	2	2	20 AWG	PVC CSA/UL 2661	Black	5.4±0.2 mm												
1210180128	A	2	3	20 AWG	PVC CSA/UL 2661	Black	5.6±0.2 mm												
1210180394	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												
1210180297	B	2	2	20 AWG	PUR CSA/UL 20668	Black	5.6±0.2 mm												
1210180126	B	2	3	20 AWG	PUR CSA/UL 20668	Black	5.6±0.2 mm												
1210180387	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												
1210180122	D	2	3	0.5 mm²	PVC TI2 CEI 20-20	Grey	5.5±0.2 mm												
-	F	2	3	0.5 mm²	CNEOMO	Grey RAL7000	5.5±0.2 mm												
1210180047	I	2	2	0.5 mm²	PVC CEI 2022 II O.R.	Grey RAL7035	5.5+0.3/-0 mm												
1210180284	I	2	3	0.5 mm²	PVC CEI 2022 II O.R.	Grey RAL7035	5.5+0.3/-0 mm												
1210180146	I	2	4	0.5 mm²	PVC CEI 2022 II O.R.	Grey RAL7035	6.5±0.2 mm												
1210180177	I	2	5	0.5 mm²	PVC CEI 2022 II O.R.	Grey RAL7035	7±0.2 mm												
1210180022	N	2	2	0.5 mm²	PVCH03	Black	5.2±0.2 mm												
1202092753	N	2	3	0.5 mm²	PVCH03	Black	5.5±0.2 mm												
1210180153	N	2	4	0.5 mm²	PVCH03	Black	6.9 mm max												
1210180046	P	2	2	0.5 mm²	PUR-BLEND	Black	5.5±0.2 mm												
1202092439	P	2	3	0.5 mm²	PUR-BLEND	Black	5.5+0.3/-0 mm												
1210180302	P	2	4	0.5 mm²	PUR-BLEND	Black	6.5±0.2 mm												
1202092215	P	2	5	0.5 mm²	PUR-BLEND	Black	7+0.3/-0.1 mm												
1210180409	A	3	2	18 AWG	PVC CSA/UL 2661	Black	6.5±0.25 mm												
1210180129	A	3	3	18 AWG	PVC CSA/UL 2661	Black	6.5±0.25 mm												
1210180159	A	3	4	18 AWG	PVC CSA/UL 2661	Black	7±0.3 mm												
1210180464	A	3	5	18 AWG	PVC CSA/UL 2661	Black	7.8±0.25 mm												
1210180351	B	3	2	18 AWG	PUR CSA/UL 20668	Black	6.8±0.2 mm												
1210180127	B	3	3	18 AWG	PUR CSA/UL 20668	Black	6.5±0.2 mm												
1210180160	B	3	4	18 AWG	PUR CSA/UL 20668	Black	7±0.2 mm												
1210180463	B	3	5	18 AWG	PUR CSA/UL 20668	Black	7.8±0.2 mm												
1210180073	D	3	3	0.75 mm²	PVC TI2 CEI 20-20	Grey	6.5±0.2 mm												
1210180145	D	3	4	0.75 mm²	PVC TI2 CEI 20-20	Grey	7.1±0.2 mm												
1202098206	I	3	2	0.75 mm²	PVC CEI 2022 II O.R.	Grey RAL7001	5.5±0.2 mm												
1210180120	I	3	3	0.75 mm²	PVC CEI 2022 II O.R.	Grey RAL7035	6±0.2 mm												
1210180143	I	3	4	0.75 mm²	PVC CEI 2022 II O.R.	Grey RAL7035	7±0.2 mm												
1210180032	N	3	2	0.75 mm²	PVCH05	Black	6.2±0.2 mm												
1210180069	N	3	3	0.75 mm²	PVCH05	Black	6.5±0.2 mm												
1210180144	N	3	4	0.75 mm²	PVCH05	Black	7.1±0.2 mm												
1210180174	N	3	5	0.75 mm²	PVCH05	Black	8.0+0.2/-0 mm												
1202094190	P	3	2	0.75 mm²	PUR-BLEND	Black	6.5±0.2 mm												
1210180071	P	3	3	0.75 mm²	PUR-BLEND	Black	6.5±0.2 mm												
1210180152	P	3	4	0.75 mm²	PUR-BLEND	Black	7±0.2 mm												
1210180384	R	3	3	0.75 mm²	TPR HAL. FREE	Black	6.5±0.2 mm												
1210180094	T	3	3	0.75 mm²	PUR CSA/UL	Yellow	6.5±0.2 mm												
1210180309	Y	3	3	0.75 mm²	SIL/0300	Red	6.5±0.2 mm												
1210180081	F	4	3	1 mm²	CNEOMO	Grey RAL7000	7.1+0.2/-0 mm												
-	F	4	4	1 mm²	CNEOMO	Grey RAL7000	7.1+0.2/-0 mm												
1210180042	I	4	2	1 mm²	PVC CEI 2022 II O.R.	Grey RAL7035	7.1+0.2/-0 mm												
1210180079	I	4	3	1 mm²	PVC CEI 2022 II O.R.	Grey RAL7035	7.1+0.2/-0 mm												
1210180036	N	4	2	1 mm²	PVCH05	Black	6.5±0.2 mm												
1210180082	N	4	3	1 mm²	PVCH05	Black	6.9±0.2 mm												
1210180117	R	4	3	1 mm²	TPR HAL. FREE	Black	7.1±0.2 mm												
1210180085	N	5	3	1.5 mm²	PVCH05	Black	8.3+0.2/-0 mm												
1210180313	I	6	2	0.35 mm²	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												
1210180149	I	9	4	0.75 mm²	PVC CEI 2022 II O.R.	Grey RAL7035	7.3±0.2 mm												
DOCUMENT STATUS		P1	RELEASE DATE		2020/09/04	13:21:28													
FORMAT: master-B-prod-A3 REVISION: J DATE: 2020/01/14		9		8		7		6		5		4		3		2		1	

TABLE 2 - PART LIST	
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1210550123	E652N3NC3011C3B
1210550139	E652N2NL1511S02
1210550160	E652N2NL151PS02
1210550206	E652N3NE1611C42
1210550207	E652N3NE1611C41
1210550254	E652P2NP1321C4H
1210550276	E652N2NL1611C4H
1210550278	E652N3NB3511000
1210550279	E652N3NL1611C4H
1210550281	E652P3NA1311A11
1210550297	E652N3NC1611000
1210550304	E652N2NE201PS02
1210550316	E652N2NE251PS02
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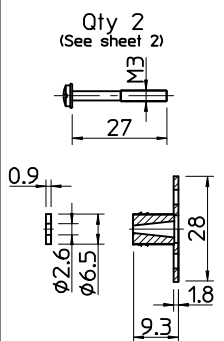
FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION															
	DIMENSION UNITS		SCALE		CURRENT REV DESC: TOL. TABLE UPDATED											
	mm		1:1													
	GENERAL TOLERANCES (UNLESS SPECIFIED)															
	ANGULAR TOL		± 1.0 °		EC NO: 642619 DRWN: SSM CHK'D: RSILLER APPR: RSILLER 2020/07/20 2020/09/04 2020/09/04											
	4 PLACES		±													
	3 PLACES		±													
	2 PLACES		± 0.05													
	DIVISIONAL SYMBOLS	1 PLACE		± 0.3		INITIAL REVISION: DRWN: APAWLAK01 APPR: MIWASIECZKO 2017/07/03 2017/07/05										
		0 PLACES		± 0.5												
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING								SERIES				
				A3-SIZE		121055		DOCUMENT NUMBER		DOC TYPE		DOC PART		REVISION		
								1210550123		PSD		000		A1		

SEE PART LIST		GENERAL MARKET		3 OF 3	
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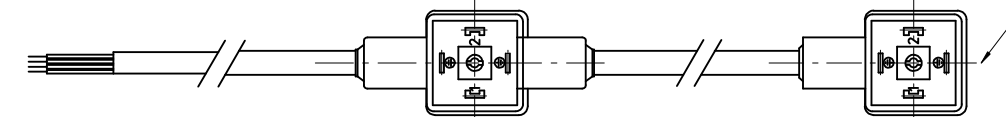
Screw M3x25
and Profile Gasket
Qty 2
(See sheet 2)



Screw M3x27
with Grommet
& Integrated Gasket
Qty 2
(See sheet 2)



CIRCUIT TAMPO PRINTOUT/WHITE
(Not for E65XXXXXXX1X000)



IN CASE OF E65XXXXXXX1X000 WITHOUT LED

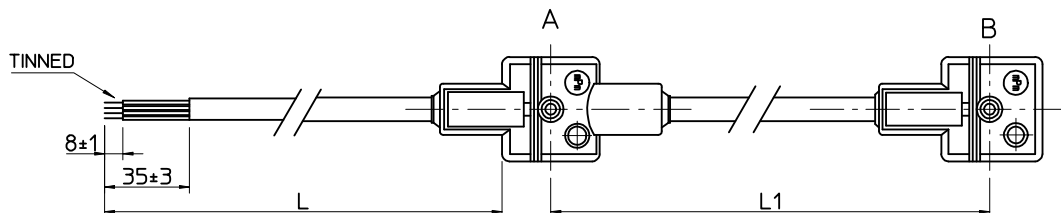
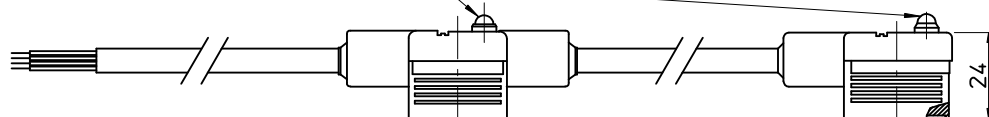
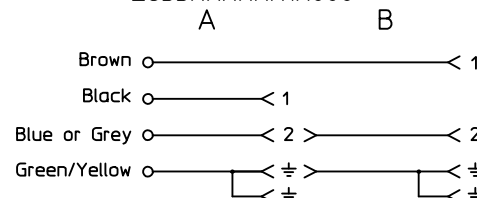


Table of lenght tolerances [mm]

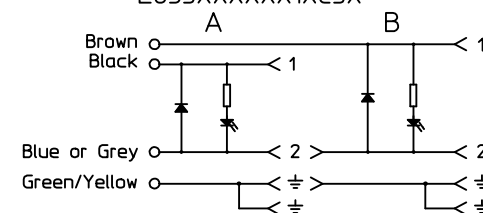
Over	Up to and including	Tolerance
0	1000	±20
1000	3000	±30
3000	5000	±40
5000	10000	±50
10000	15000	±100
15000	20000	±150
20000		±L/100

NOTE: Ground on schematics does not
apply to E652XXXXXXX1XXXX

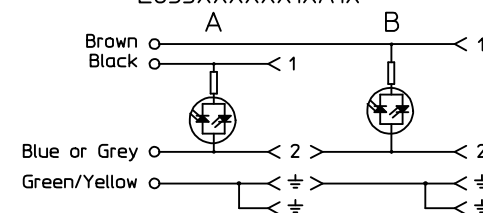
ELECTRICAL DIAGRAM
E653XXXXXXX1X000



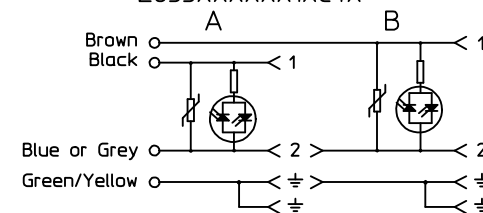
ELECTRICAL DIAGRAM
E653XXXXXXX1XC3X



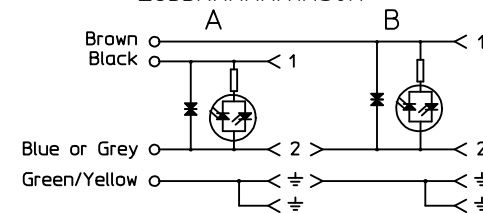
ELECTRICAL DIAGRAM
E653XXXXXXX1XA1X



ELECTRICAL DIAGRAM
E653XXXXXXX1XC4X



ELECTRICAL DIAGRAM
E653XXXXXXX1XS0X



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

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	DESIGN UNITS METRIC	FIRST ANGLE PROJECTION
TITLE E65XXXXXXX1XXXX DUAL DIN FORM A		
DOCUMENT NO. SD-121055-001		
SHEET NO. 1 OF 4		

10

9

8

7

6

5

4

3

2

1

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.	-
1210180038	N	4	2	1 mm2	PVCH05	Black	6,5±0,2 mm	OK.	-
1210180082	N	4	3	1 mm2	PVCH05	Black	6,9±0,2 mm	OK.	-
1210180117	R	4	3	1 mm2	TPR HAL. FREE	Black	7,1±0,2 mm	OK.	-
1210180085	N	5	3	1,5 mm2	PVCH05	Black	8,3±0,2/-0 mm	OK.	-
1210180313	I	6	2	0,35 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	4,8±0,2 mm	OK.	-
-	A	7	3	20 AWG	PVC CSA/UL 2661	Yellow	5,6±0,2 mm	OK.	OK.
1210180149	I	9	4	0,75 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	7,3±0,2 mm	OK.	-

TABLE 1 - CABLES TYPE

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

DRAWING UPDATE EC NO: IPG2013-1505 DRWN: JMARZALEK 2013/03/28 CHKD: APPR: MIWASIECZKO 2013/04/02	QUALITY SYMBOLS
	▽=0
	◁=0
	DESCRIPTION

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± ---	± ---
1 PLACE	± ---	± ---
0 PLACE	± ---	± ---

ANGULAR ± --- °
DRAFT WHERE APPLICABLE
MUST REMAIN
WITHIN DIMENSIONSDIMENSION STYLE
MM ONLY

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

MATERIAL NO.
SEE SHEET 2&3SCALE
1:1

TITLE

E65XXXXXXXX1XXXX

DUAL DIN FORM A

SD-121055-001

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SHEET NO.

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