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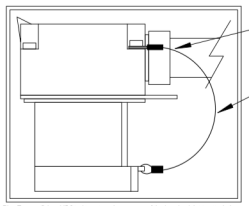
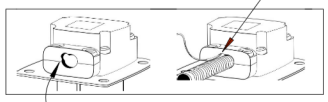
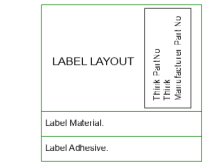
Wire Id	Type	Colour	Size	From	Loc.	To	Loc.	Lenght (mm) (Cu)
1	RADOX 125 HALOGEN-FREE	BK	2.50 mm²	A40	L1	/1.C21C2	A13.J7P.1	1 /1.D91D9	2000
2	RADOX 125 HALOGEN-FREE	BU	2.50 mm²	A40	N	/1.C21C2	A13.J7P.1	10 /1.D91D9	2000
3	RADOX 125 HALOGEN-FREE	GNYE	2.50 mm²	A40	PE	/1.C21C2	A13.J7P.1	15 /1.E91E9	1990
4	RADOX 125 HALOGEN-FREE	GNYE	2.50 mm²	A40	PE	/1.C21C2	X85.1.1	1 /1.D41D4	310
5	RADOX 125 HALOGEN-FREE	WH	0.50 mm²	A40	P	/1.D21D2	A13.J7P.1	14 /1.E91E9	2000
6	RADOX 125 HALOGEN-FREE	RD	0.50 mm²	A40	R1	/1.C21C2	A13.J7P.1	11 /1.D91D9	2000
7	RADOX 125 HALOGEN-FREE	GN	0.50 mm²	A40	PE	/1.C21C2	A40	R2	/1.C21C2	60
9	RADOX 125 HALOGEN-FREE	BK	1.50 mm²	A13.J7P.1	2	/1.D91D9	A4.X1	4 /1.E21E2	2300
10	RADOX 125 HALOGEN-FREE	BU	1.50 mm²	A13.J7P.1	16	/1.E91E9	A4.X1	2 /1.E21E2	2300
11	RADOX 125 HALOGEN-FREE	GNYE	1.50 mm²	A4.X1	GND	/1.E21E2	A13.J7P.1	7 /1.D91D9	2300

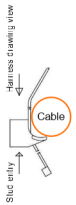
NOTE:
1. CABLE QUALITY ACCORDING TO ISO 6722:2006 AND/OR SAE J1654.
2. CABLE HALOGEN FREE WITH ISOLATION.
3. MATERIALS USED IN THIS ASSEMBLY SHALL BE IN CONFORMITY WITH EU ELV 2000/53/EC DIRECTIVE.

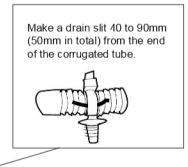
Device Names	Qty.	Manufacturer	Part Number	Description	Alternative
A85	1	Anixter Components	33488355	Grommet GET14-20	
A40	1	Brookdale Fasteners		Ring Crimp Connector Un-insulated M3/0.5mmsq, AWS 1.5/3mm	
14	1	Davies Industrial Supplies	AT87	P.I.B Self Amalgamating 19x0.5mm Black	
A40	1	Erma		Erma Ring Tongue Crimp M5 Type WS2-M5	
C291	1	HELLERMANN TYTON	150-10144	CLIPS T50SSB5-MC2-BK-R1	
C110,C120,C83,C86,C89,C90	6	HELLERMANN TYTON	T50RSBS5.N66-BK	WELD STUD FIXING TIE BLACK	
C433,C434,C435	3	HELLERMANNTYTON	T50R-FT7	CLIPS T50R-FT7 Black	
A40	1	Japanese Solderless Terminals		Ring Crimp Connector Type 2-M3 or Centbre Type 2.5-M3.5/1	
X85.1.1	1	Japenese Solderless Terminals		JST Ring Tongue Crimp M6-2.5 Type 2-6	
X85.1.1	1	Japenese Solderless Terminals		JST Ring Tongue Crimp M6-2.5 Type 2-6	
A40	1	LEWDEN	LEV 499	CHARGE INLET LEWDEN	
A40	1	LEWDEN	PM16/3KC	CAP PUSH FIT PM16/3KC	
A4.X1	1	PFISTERER	350 208-001	Connector	
A798	1	Printasleeve		Printasleeve Green/Yellow Heat Shrink	
A40	2	RS Components	267-3789	Ring Crimp M3.5 Blue	
A786	1	Raychem	Rayfast ATUM - 12/4.0	Raychem ATUM 12/4.0 Black Heat Shrink	
A790	1	Raychem	Rayfast ATUM - 19/6.0	Raychem ATUM 19/6.0 Black Heat Shrink	
	1715	SCHLEMMER	1227008	CORRUGATED TUBE ORANGE Ø 11.7/8.4 UNSLIT	
	1775	SCHLEMMER	1227012	CORRUGATED TUBE 15.7/12.2 UNSLIT ORANGE	
C133	1	SCHLEMMER	7807288	REDUCER NW10-8.5 7807288	
C133	1	SCHLEMMER	9806104	T-PIECE NW13-13-10 9806104	
A13.J7P.1	1	TYCO	1-206138-0	CABLE CLAMP SIZE23 CPC 1-206138-0	
A13.J7P.1	4	TYCO	2-66358-1	0.8-2.0 TERMINAL FEMALE 2-66358-1 ENHANCED HIGH CUR	
A13.J7P.1	4	TYCO	213847-1	2.0-3.0 TERMINAL FEMALE 213847-1 Ag PLT 125 PWRBND	
A13.J7P.1	1	TYCO	796203-1	CONNECTOR 16PIN FEMALE 796203-1	

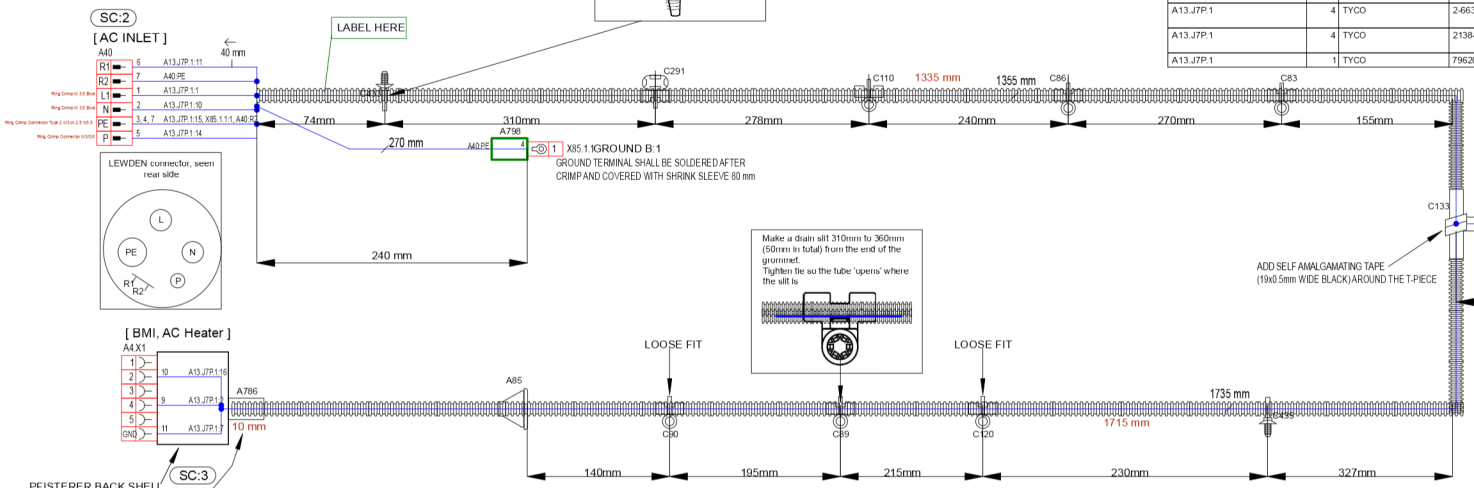






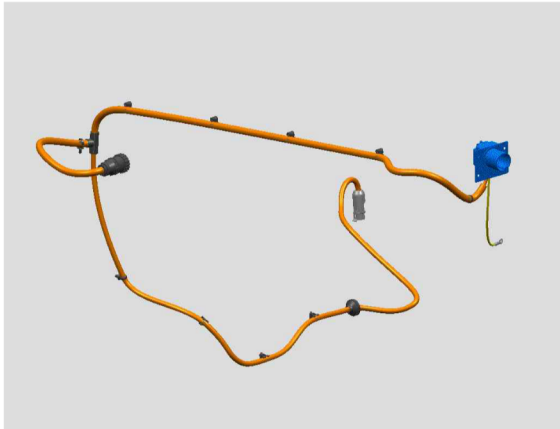






Pfisterer connector 350-208-007 includes the following sub parts:
2x outer shell plastic moulding
2x inner plastic moulding contact holder
1x rear grommet
3x female contacts
1x o ring seal
1x black plastic ring

SC	Significant Characteristics
1	THERE IS AN OVERLENGTH OF 20mm PER METER ON THE WIRES TO PROTECT THE WIRES FROM PULL FORCE. MAKE SURE THAT THE CORRUGATED TUBE IS PROPERLY SECURED IN EACH END WITH A CRIMP SLEEVE.
2	ALL RIVETED EYE TERMINALS MUST BE INSPECTED AND FIXED. TYPE OF RING TERMINALS: "L" AND "N" - INSULATED "PE" - UNINSULATED "P" UNINSULATED WITH BLACK SHRINK SLEEVE
3	MAKE SURE THAT THE PFISTERER BACK SHELL COVERS THE CORRUGAL. PUT A 10mm CRIMP SLEEVE 24/6 WITH GLUE ON THE CORRUGATED TUBE END AS A STRENGTH RELIEF INSIDE THE BACK SHELL.
4	ARALDITE 2045 GLUE 50mm FROM THE BACK OF CONNECTOR INSIDE CORRUGATED TUBE
CC	Critical Characteristics
1	REED SWITCHES ARE TO BE TESTED TO ENSURE THEY ARE OPEN. CONDITION AND CLOSING FUNCTION ACCORDING TO MAGNETS IN MATING CONNECTOR.
2	HV ISOLATION TEST TO BE PERFORMED AFTER FULL ASSEMBLY. COMMON MODE BETWEEN L1+N TOWARDS PE+PD+CP. REQUIREMENT: NO FLASH OVER (OR SIGN OF ISOLATION BREACH) WHEN APPLYING 1500V AC FOR 1 MINUTE.



Length tolerances

Nominal length	Tolerances				
	Partial dim.		Total dim.		Positional dim.
	+	-	+	-	
- 500	15	5	20	0	±10
>500 - 1500	25	5	30	0	±10
>1500 - 4000	30	10	50	0	±15
>4000 - 5000	30	10	100	0	±20
>5000	2%	0,5%	2%	0	±20

General tolerance positioning of cable ties and clips: ±5 mm

Revision	Task Number	Description	Date	Change Req	Prepared	Approved
C	T001 T002 T003 T004 T005 T006 T007	Added 50mm slit on corrugated tube, clip C89 Added 50mm slit on corrugated tube, clip C433 Added Araldite 2045 Glue & SC:4 Added self amalgamating tape to T-PIECE Added 3D detail and note updates Deleted red spot tape around to terminal X.85 Updated SC & CC	02022011	N/A	JJF	PBA
B	N/A	Changed corrugated tube from grey to orange	20100603	GEN-2	MSV	PBA
A	N/A	Changed lengths between clips, one clip moved	20100302	GEN-2	MSV	EFP

HARNESS	Document type	THINK	
MSV	Prepared by		
A306 MY2011 Pre-series	File name		
Approved by	A2 Sheet Size	Created 20100122 / Change Date	Page 1 of 1
A306	Description	Drawing no	Status
MAINS INLET ASSY 1PH 309 W/AUX AC		542.3080.C	DRAFT

Plotted: 18.05.2011 13:35 msv

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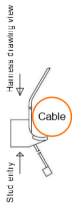
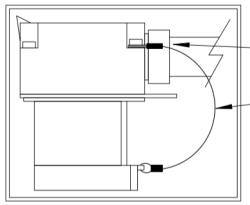
Wire Id	Type	Colour	Size	From	Loc.	To	Loc.	Lenght (mm) (Cu)
1	RADOX 125 HALOGEN-FREE	BK	2.50 mm²	A40	L1	/1.D1	A13.J7P	1 /1.D9	1895
2	RADOX 125 HALOGEN-FREE	BU	2.50 mm²	A40	N	/1.D1	A13.J7P	10 /1.D9	1895
3	RADOX 125 HALOGEN-FREE	GNYE	2.50 mm²	A40	PE	/1.D1	A13.J7P	15 /1.E9	1895
4	RADOX 125 HALOGEN-FREE	GNYE	2.50 mm²	A40	PE	/1.D1	X85	1 /1.E3	280
5	RADOX 125 HALOGEN-FREE	WH	0.50 mm²	A40	P	/1.D1	A13.J7P	14 /1.E9	1895
6	RADOX 125 HALOGEN-FREE	RD	0.50 mm²	A40	R1	/1.D1	A13.J7P	11 /1.D9	1895
7	RADOX 125 HALOGEN-FREE	GN	0.50 mm²	A40	PE	/1.D1	A40	R2 /1.D1	80

NOTE:
1. CABLE QUALITY ACCORDING TO ISO 6722:2006 AND/OR SAE J1654.
2. CABLE DIMENSIONS ACCORDING TO ISO 6722:2006, HALOGEN FREE INSULATION PREFERED.
3. SHIELD NON-CURRENT CARRYING, FOR EMC AND GROUND PROTECTION ONLY.
4. MATERIALS USED IN THIS ASSEMBLY SHALL BE IN CONFORMITY WITH EU ELV 2000/53/EC DIRECTIVE.
5. CONNECTOR A4 X1 IS SPECIFIED WITH ASSEMBLY PART NUMBER. LOOSE PIECE SUB ITEM IS AVAILABLE FROM PFISTERER.

Device Names	Qty.	Manufacturer	Part Number	Description	Alternative
A13.J7P	4			0.8-2.0 TERMINAL FEMALE 2-66358-1 ENHANCED HIGH CUR	
A13.J7P	4			2.0-3.0 TERMINAL FEMALE 213847-1 Ag PLT 125 PWRBND	
X85	1	G&HARTMAN	970794	RING TERMINAL M6 2.6-6.0	
C292,C297	2	HELLERMANN	T50R-FT7 BLACK	CLIPS T50R-FT7 BLACK	
C298	1	HELLERMANN TYTON	150-10144	CLIPS T50SSB5-MC2-BK-R1	
C293,C294,C295	3	HELLERMANN TYTON	T50RSBS5.N66-BK	WELD STUD FIXING TIE BLACK	
A40	1	LEWDEN	LEV 499	CHARGE INLET LEWDEN	
A40	1	LEWDEN	PM16/3KC	CAP PUSH FIT PM16/3KC	
A712	1	Raychem		Crimp Sleeve ATUM 9/3 BLACK w/o glue	
	1775	SCHLEMMER	1227012	CORRUGATED TUBE 15.7/12.2 UNSLIT ORANGE	
A13.J7P	1	TYCO	1-206138-0	CABLE CLAMP SIZE23 CPC 1-206138-0	
A13.J7P	1	TYCO	796203-1	CONNECTOR 16PIN FEMALE 796203-1	





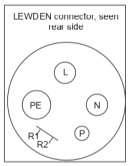
UNINSULATED TERMINAL RING MOUNTED 45DEG ANGLE ON TO CONNECTOR HOUSING.

CUT THE LENGHT TO 200mm

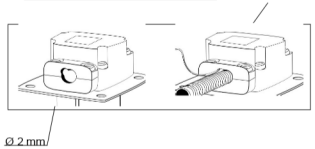
LABEL LAYOUT

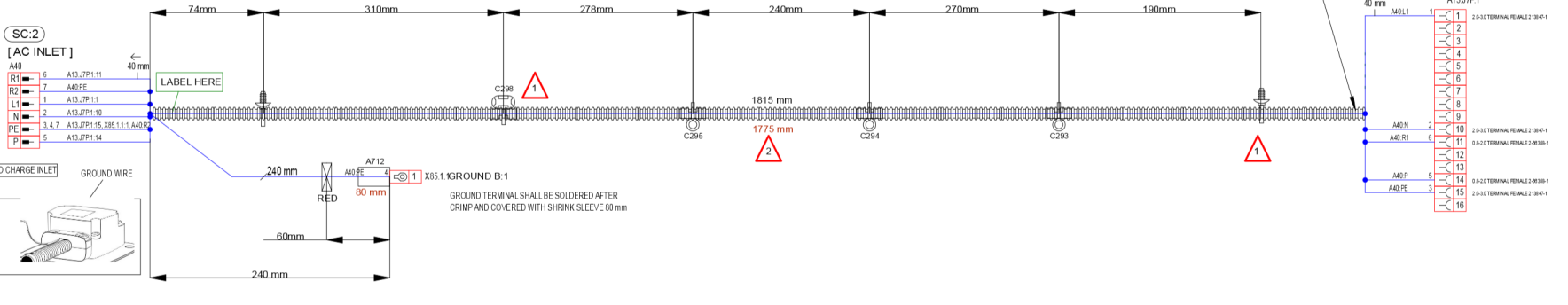
Think Part No
Think
Manufacturer Part No

ADD 40 MM OF SHRINK TUBE OVER CORRUGATE SLEEVE IN CABLE CLAMP



CAP (PM16/3KC) MOUNTED ON TO CHARGE INLET





GROUND TERMINAL SHALL BE SOLDERED AFTER CRIMP AND COVERED WITH SHRINK SLEEVE 80 mm

1 (Turned the clips 180 degrees)

2 (Changed the colour on the corrugated tube from grey to orange. Removed the ORANGE shrink/tape spots.

SC	Significant Characteristics
1	THERE ARE AN OVERLENGHT OF 20mm ON THE WIRES TO PROTECT THE WIRES FROM PULL FORCE. MAKE SURE THAT THE CORRUGAL IS PROPERLY SECURED IN EACH END.
2	ALL RIVETED EYE TERMINALS MUST BE INSPECTED AND FIXED. TYPE OF RING TERMINALS: "L" AND "N" - INSULATED "PE" - UNINSULATED "P" UNINSULATED WITH BLACK SJHRINK SLEEVE
CC	Critical Characteristics
1	REED SWITCES ARE TO BE TESTED FOR NORMALLY OPEN. CONDITION AND CLOSING FUNCTION ACCORDING TO MAGNETS IN MATING CONNECTOR.

Length tolerances

Nominal length	Tolerances				
	Partial dim.		Total dim.		Positional dim.
	+	-	+	-	
- 500	15	5	20	0	±10
>500 - 1500	25	5	30	0	±10
>1500 - 4000	30	10	50	0	±15
>4000 - 5000	30	10	100	0	±20
>5000	2%	0,5%	2%	0	±20
General tolerance positioning of cable ties and clips: ±5 mm					

B	Change the Corrated tube from Grey to Orange	GEN-2	20100603	MSV	PBA
A	New harness	GEN-2	20100302	MSV	EFP

HARNESS	Document type	THINK	
MSV	Prepared by		
A306 MY2011 Pre-series	File name		
Approved by	A2 Sheet Size	Created 20100122 / Change Date	Page 1 of 1
A306	Description	Drawing no	Status
MAINS INLET ASSY 1PH 309 WO/AUX AC		542.3090.B	R

Plotted: 18.05.2011 13:35 msv