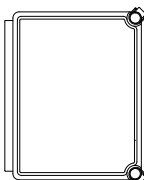
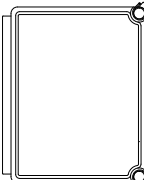
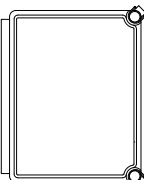
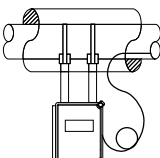


# Raychem MI COMPONENTS AND ACCESSORIES

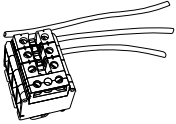
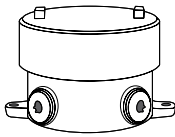
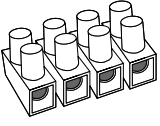
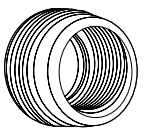
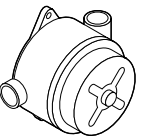
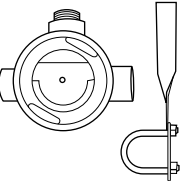
## SYSTEM COMPONENTS

### Junction Boxes - Power and Splice Connection Kits

Product	Order reference	Description
<b>Fibreglass CID2 enclosure</b> 	MIJB-864-A	<p>Junction box with pre-drilled earth plate for use with MI heating units.</p> <p>Typical uses - Power, splice and end box for 3 phase systems</p> <p>Hazardous locations: CID2 Groups B, C and D. Maximum operating voltage 600Vac. Maximum 35A per terminal, rated 18AWG to 6AWG, NEMA 4X.</p> <p>Entries: Up to 8 x 1/2" and 3 x 3/4". Power cable gland and hubs not included. Two mounting brackets (MBRP-B) and two pipe straps must be ordered separately for installation.</p> <p>Enclosure dimensions: 8" x 6" x 4" (200 x 150 x 100mm)</p>
<b>Fibreglass CID2 enclosure</b> 	MIJB-1086-A	<p>Junction box with pre-drilled earth plate for use with MI heating units. Accommodates up to 3 power cables.</p> <p>Typical uses - Power, splice and end box for 3 phase systems</p> <p>Hazardous locations - CID2 Groups B, C and D. Maximum operating voltage 600Vac. Maximum 35A per terminal, rated 18AWG to 6AWG, NEMA 4X.</p> <p>Entries: Up to 11 x 1/2" and 8 x 3/4". Power cable gland and hubs not included. Two mounting brackets (MBRP-B) and two pipe straps must be ordered separately for installation. Order a separate MIJB-LPWR-KIT for #2 or #4AWG power cable to downsize to #6AWG (35A).</p> <p>Enclosure dimensions: 10" x 8" x 6" (250 x 200 x 150mm)</p>
<b>Fibreglass CID2 enclosure</b> 	MIJB-1086-B	<p>Junction box with pre-drilled earth plate for use with MI heating units. Accommodates up to 7 outgoing heating cables and one incoming power cable. It can also be used as a marshalling box – one incoming power cable and 5 outgoing power cables.</p> <p>Typical uses - Power or marshalling, splice and end box for 3 phase systems.</p> <p>Hazardous locations: CID2 Groups B, C and D. Maximum operating voltage 600Vac. Maximum 35A per terminal, rated 18AWG to 6AWG, NEMA 4X.</p> <p>Entries: Up to 11 x 1/2" and 8 x 3/4". Power cable gland and hubs not included. Two mounting brackets (MBRP-B) and two pipe straps must be ordered separately for installation. Order a separate MIJB-LPWR-KIT for #2 or #4AWG power cable to downsize to #6AWG (35A).</p> <p>Enclosure dimensions: 10" x 8" x 6" (250 x 200 x 150mm)</p>
<b>Enclosure mounting bracket</b> 	MBRP-B	<p>Enclosure mounting bracket for MIJB series fibreglass enclosures. Mounting bracket enables enclosure installation and connection prior to application of insulation and cladding. Stainless steel pipe support bracket for MIJB-864-A, MIJB-1086-A and MIJB-1086-B fibreglass enclosures. Two brackets are required to support each enclosure. Each bracket requires one pipe strap.</p>

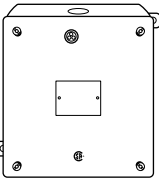
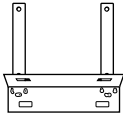
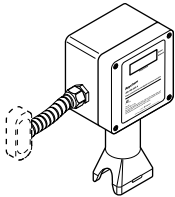
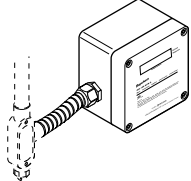
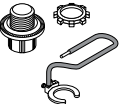
**SYSTEM COMPONENTS**

**Junction Boxes - Power and Splice Connection Kits**

Product	Order reference	Description
<b>Terminal kit for MIJB-1086 model</b> 	MIJB-LPWR-KIT	Terminal kit to facilitate downsizing of large power cables.  Large power wire kit to downsize #2 or #4 power cable to #6AWG (max 35amps for enclosure terminal blocks). Use with MIJB-1086-A and MIJB-1086-B enclosures as required.
<b>Cast CID1 enclosure</b> 	XMI-JB	Aluminum enclosure for CID1 areas.  Typical uses: MI heating units power or splice connection box, RTD connection box  Hazardous locations - CID1 Groups B, C and D, Maximum operating voltage 600Vac, Includes 4 pole terminal block (CSA-600 Vac, 65 A, 18-6 AWG /UL-300 Vac, 65 A, 18-6 AWG), NEMA 4X.  Entries : 5 x 3/4" and includes 3 x 3/4" plugs, two reducer bushings (3/4" x 1/2") and two mounting feet with space to tap hole for bonding wire. Power cable gland should be purchased separately. Additional terminal strips or reducer bushings may also be purchased separately for additional RTD connection. (4POLETSTRIP and PTRDBH3412)  Enclosure dimensions: 4 1/2" x 3 1/2" (114 x 89mm).
<b>Terminal strip</b> 	4POLETSTRIP	Terminal strip for enclosure,  4 pole terminal strip (CSA-600 Vac, 65 A, 18-6 AWG /UL-300 Vac, 65 A, 18-6 AWG) for use with XMI-JB enclosure. May be used for additional RTD connections.
<b>Reducer bushing</b> 	PTRDBH3412	Reducer bushing for enclosure,  Zinc plated steel reducer bushing for use with XMI-JB enclosure. Reduces 3/4" NPT tapered hole to 1/2" NPT. Body length 23/32" (18mm), Class I, Div. 1 & 2, Groups A, B, C, D. Class I, Zone 1, Groups IIC, IIB, IIA. Class II, Div. 1 & 2, Groups E, F, G.
<b>CID1 enclosure with mounting feet</b> 	RMI-JB3	Copper-free aluminum alloy box with three entries for use with MI heating cables.  Typical use : power or splice connection box  Includes terminal block (500 Vac, 50 A, 2 x 6 AWG) and three 3/4" x 1/2" reducers and two 3/4" NPT plugs. FM and CSA approved for: Class I, Div. 1 & 2, Groups B, C, D; Class II, Div. 1 & 2, Groups E, F, G; and Class III.  Enclosure dimensions: 6.1" x 5.2" x 3.9" (156 mm x 133 mm x 98 mm).
<b>CID1 enclosure with bracket</b> 	PT-JB	A smaller ferro-alloy junction box with three entries for use with MI heating cables.  Typical use : power or splice connection box  Three 3/4" NPT entries. Provided with one plug and two 3/4" x 1/2" reducers. Includes 4 pole terminal block (CSA-600 Vac, 65 A, 18-6 AWG / UL-300 Vac, 65 A, 18-6 AWG) and stainless steel support bracket (U-clamp). UL and CSA approved for: Class I, Div. 1 & 2, Groups A, B, C, D; Class II, Div. 1 & 2, Groups E, F, G.  Enclosure dimensions: 5.5" x 4.75" x 3" (140 mm x 121 mm x 76 mm).

**SYSTEM COMPONENTS**

**Junction Boxes - Power and Splice Connection Kits**

Product	Order reference	Description
<b>Cast CID2 enclosure</b>  D1297TERM4	D1297TERM4	A large cast aluminum junction box (NEMA 3R) for installation in nonhazardous and CID2 areas. Typical use : power or splice connection box Three 1/2" NPT entries on bottom, provided with plugs. Includes 4 pole terminal block (CSA-600 Vac, 65 A, 18-6 AWG / UL-300 Vac, 65 A, 18-6 AWG). External mounting feet. CSA approved for Class I, Div 2, Groups A, B, C, and D. Enclosure dimensions: 6" x 6" x 4" (152 mm x 152 mm x 101 mm).
<b>Support bracket for D1297TERM4</b> 	D1297BRACK	Optional stainless steel mounting bracket for junction box type D1297TERM4. To be strapped on metal cladding of pipe insulation using metal banding or pipe straps (based on outer dimension of insulation).
<b>Nonhazardous enclosure and digital electronic controller</b>  JBS-100-ECP-A  JBS-100-ECW-A	JBS-100-ECP-A JBS-100-ECW-A	Electronic temperature controllers that provide accurate control of a heating circuit using a RTD sensor. Adjustable set points between 32°F to 425°F (0°C to 218°C), power input of 120 Vac to 277 Vac, and current switching up to 30 A. c-CSA-us (certified to U.S. and Canadian Standards) for use in nonhazardous locations. Requires MI grounding kit. The JBS-100-ECP-A is pipe mounted and serves as a power connection kit for both Raychem self-regulating and Raychem mineral insulated heating cables. The JBS-100-ECW-A is wall mounted and may be used with all types of heating cables. It can also be used as a power connection kit with Raychem MI cables.
<b>MI cable grounding kit</b> 	MI-GROUND-KIT	Required grounding kit for use with JBS-100-ECP-A and JBS-100-ECW-A. Allows for a direct connection to a Raychem MI heating cable, eliminating the need for a separate junction box.

**ACCESSORIES**

**Attachment Materials**

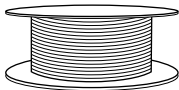
Product	Order reference	Description
<b>Pipe straps for MI heating cable</b>	PB (see Table 1)	Stainless-steel straps for holding MI heating cables onto pipe. Pliers are the only tool required to pull the pipe strap tight. Allow one pipe strap per foot of pipe (3.3 pipe straps per meter of pipe).



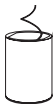
**Table 1 Available Pipe Straps**

Order Reference	Pipe diameter	Package quantity
PB 125	To 1-1/4"	50 pc
PB 300	1-1/2" to 3"	35 pc
PB 600	3-1/2" to 6"	25 pc
PB 1000	6" to 10"	1 pc
PB 1200	To 12"	1 pc
PB 2400	To 24"	1 pc
PB 3600	To 36"	1 pc

<b>Tie wire</b>	051CUPRON	16 AWG tie wire for fastening Alloy 825 MI heating cables on pipes. Do not use with copper-sheathed MI heating cables; use PB pipe straps. Particularly good for irregular shaped objects like valves and pumps. Order quantity as required (in ft) as per Table 2.
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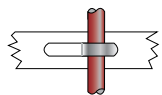
<b>RMI-TW</b>	559600-000	Tie wire for fastening steel heating cables on pipes. Especially suitable for irregular shaped objects such as pumps, valves, flanges. Supplied in 50m reels.
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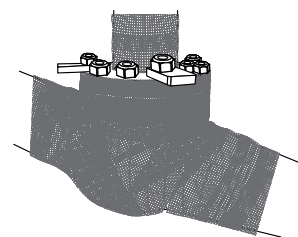
**Table 2 Allowance for Banding / Tie Wire on Pipes**

Pipe size (inches)	1	1.5	2	4	6	8	10	12	14	16	18	20	24	30	36	48
Required length (ft) per ft of pipe	0.8	1.1	1.2	1.6	2.1	2.8	3.5	4.2	4.6	5.2	5.9	6.5	7.9	9.8	11.8	15.7
Required length (m) per m of pipe	0.8	1.1	1.2	1.6	2.1	2.8	3.5	4.2	4.6	5.2	5.9	6.5	7.9	9.8	11.8	15.7

<b>Stainless-steel prepunched strapping band</b>	107826-000	HARD-SPACER-SS-25MM-25M stainless steel prepunched strapping to hold MI heating cable in place. Supplied in 82 ft (25.0 m) rolls. Use on large pipes to simplify installation of multiple heating cables. For quantities, see Table 2 (installation every 1 ft = 0.328 m).
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<b>HWA-METAL-MESH-SS-50MM-10M</b>	1244-005772	Stainless steel mesh to hold heating cables on valves, pumps or other odd shaped surfaces. This mesh provides optimum contact and heat transfer between heating cables and heated equipment and can be used for exposure temperatures up to 400°C (752°F).
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10 m per roll. 50 mm width. Weight: 0.36 kg.


**ACCESSORIES**

**Attachment Materials**

Product	Order reference	Description
<b>Banding</b> 	BAND100FT	Stainless steel banding used to strap MI cables to pipes Ideal for large OD pipes 100ft roll x ½” wide x 0.020” thick (30m x 12.5mm wide x 0.5mm thick) Use with BANDCLIP100 banding clips ordered separately
<b>Clips</b> 	BANDCLIP100	Stainless steel clips used with stainless steel banding 100 clips per package Use with BAND100FT ordered separately
<b>Tensioner</b> 	T34P	Ratchet-type tensioning tool tightens stainless-steel banding used to support MI Cables.
<b>Crimper</b> 	S12P	Crimping tool used to crimp clip onto stainless-steel banding.

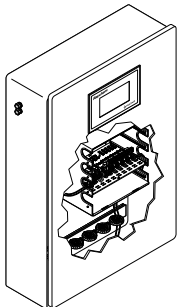
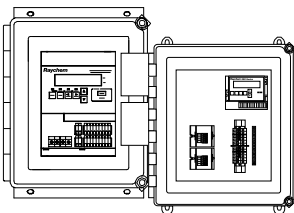
**ADDITIONAL ACCESSORIES AND COMPONENTS**

**Attachment Materials**

Product	Order reference	Description
<b>Electric traced label</b> 	ETL - English ETL - French	Attach the label to the outside of the thermal insulation weather barrier to indicate presence of electrical heat tracing. Use one label for every 10 feet (3 m) of pipe, alternating on either side of the pipe. Also install at equipment requiring periodic maintenance (control valves, pumps, instruments, etc.).

**Temperature controls**

For a complete selection of control and monitoring products, including line-sensing thermostats, see Control and Monitoring.





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