

GM2300 SERIES **Enclosures** for Multiplexer **UNITS D2000M Series**



FIELD MOUNTING ENCLOSURES

GM2300 SERIES

FOR D2000M SERIES MULTIPLEXER SYSTEM

MODELS TABLE

AND

CHARACTERISTICS

The GM2300 series field mounting enclosures are manufactured from carbon steel or stainless steel 316 sheet to provide high levels of corrosion resistance to process environments. The GM2300 series are suitable for Zones 0, 1, 2 and 20, 21, 22 application, equipped with suitable cable glands to accommodate wiring and one, two or four D2000 Series Multiplexer units D2010, D2011 and D2030. Models GM2322 and GM2329 are provided each with four flanges to let the customer accommodate the cable gland.

All other models are supplied with appropriate cable gland as indicated in the table. All cable glands are size PG16 and codes PGM is for plastic blue colour; BRA is for brass armoured cable; BRNA is for brass non armoured cable; SSA is for Stainless steel armoured cable; SSNA is for stainless steel non armoured cable.

The carbon steel models are painted in blue colour.

All models are equipped with internal steel plate and T35 DIN Rail, according to EN 50022, for D2000M series system units mounting and wiring.

Models with the code final letter "H" are equipped with heating cable and an EEx d thermostat.

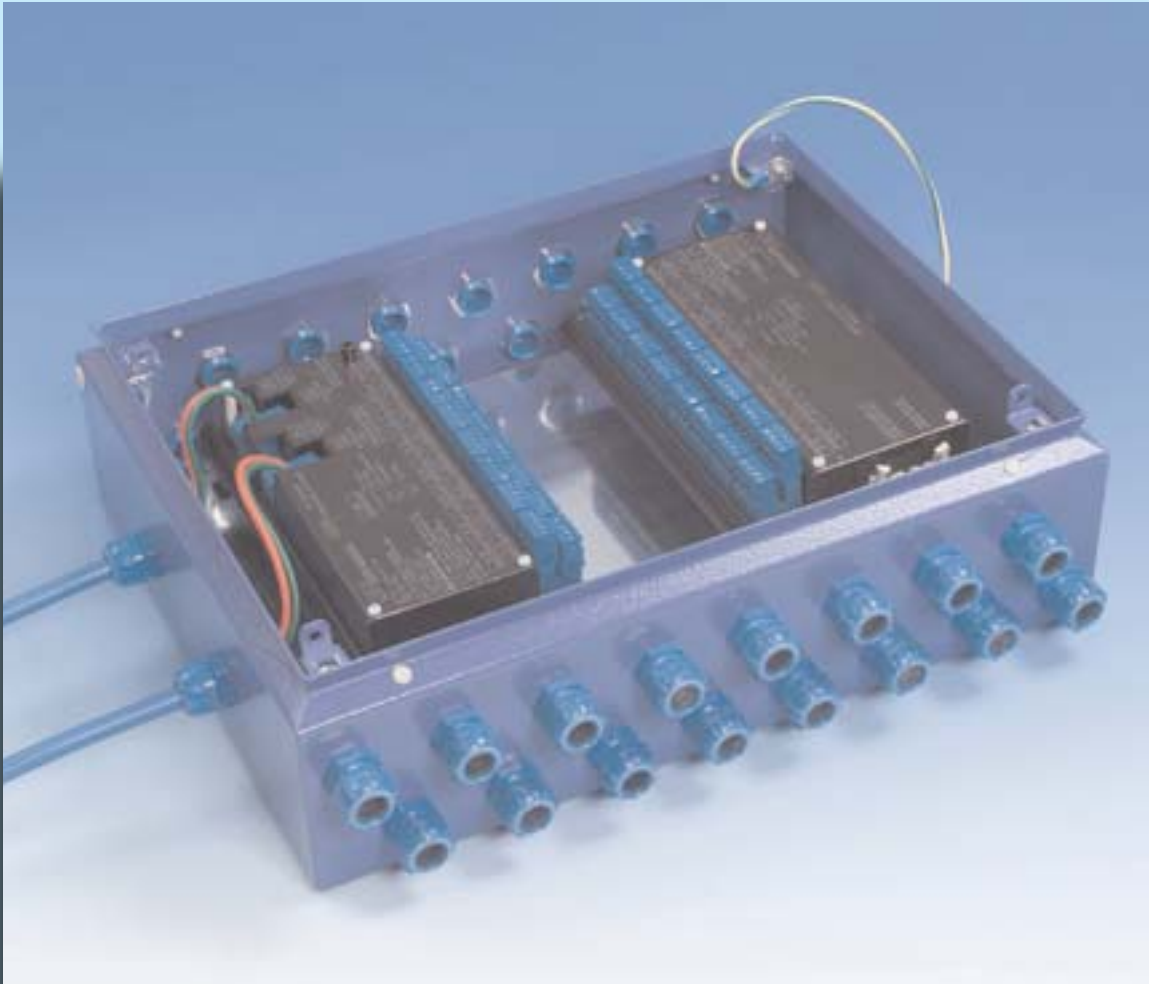
These boxes require an EEx e junction box for the 220 Vac supply of the heating cable. Applications are for low ambient temperature of -40 °C.

Model	Material	Prot.	N. of Cable Gland	Color	Overall Dimension in mm.	Weight Kg	Suitable for mounting
GM2310	Carbon steel	IP65	18 PMG	Blue	300 x 200 x 120	4	One D2010M
GM2311	Stainless steel 316	IP65	18 PMG	St. St.	300 x 200 x 150	7	One D2010M
GM2312	Stainless steel 316	IP65	18 BRA	St. St.	300 x 200 x 150	7	One D2010M
GM2313	Stainless steel 316	IP65	18 BRNA	St. St.	300 x 200 x 150	7	One D2010M
GM2314	Stainless steel 316	IP65	18 SSA	St. St.	300 x 200 x 150	7	One D2010M
GM2315	Stainless steel 316	IP65	18 SSNA	St. St.	300 x 200 x 150	7	One D2010M
GM2316	Carbon steel	IP65	34 PMG	Blue	400 x 300 x 120	7	Two D2010/11M or one D2030M
GM2317	Stainless steel 316	IP65	34 PMG	St. St.	400 x 300 x 200	11	Two D2010/11M or one D2030M
GM2318	Stainless steel 316	IP65	34 BRA	St. St.	400 x 300 x 200	11	Two D2010/11M or one D2030M
GM2319	Stainless steel 316	IP65	34 BRNA	St. St.	400 x 300 x 200	11	Two D2010/11M or one D2030M
GM2320	Stainless steel 316	IP65	34 SSA	St. St.	400 x 300 x 200	11	Two D2010/11M or one D2030M
GM2321	Stainless steel 316	IP65	34 SSNA	St. St.	400 x 300 x 200	11	Two D2010/11M or one D2030M
GM2322	Carbon steel	IP55	Flanged	Blue	400 x 300 x 120	8	Two D2010/11M or one D2030M
GM2323H	Stainless steel 316	IP65	34 BRA	St. St.	400 x 300 x 200	12	One D2010/11M or D2030
GM2324H	Stainless steel 316	IP65	34 BRNA	St. St.	400 x 300 x 200	12	One D2010/11M or D2030M
GM2325H	Stainless steel 316	IP65	34 SSA	St. St.	400 x 300 x 200	12	One D2010/11M or D2030M
GM2326H	Stainless steel 316	IP65	34 SSNA	St. St.	400 x 300 x 200	12	One D2010/11M or D2030M
GM2327	Carbon steel	IP65	68 PMG	Blue	600 x 400 x 120	13	Four D2010/11M or two D2030M
GM2328	Stainless steel 316	IP65	68 PMG	SS	600 x 400 x 200	20	Four D2010/11M or two D2030M
GM2329	Stainless steel 316	IP65	68 BRA	SS	600 x 400 x 200	20	Four D2010/11M or two D2030M
GM2330	Stainless steel 316	IP65	68 BRNA	SS	600 x 400 x 200	20	Four D2010/11M or two D2030M
GM2331	Stainless steel 316	IP65	68 SSA	SS	600 x 400 x 200	20	Four D2010/11M or two D2030M
GM2332	Stainless steel 316	IP65	68 SSNA	SS	600 x 400 x 200	20	Four D2010/11 or two D2030
GM2333	Carbon steel	IP55	Flanged	Blue	600 x 400 x 120	15	Four D2010/11M or two D2030M
GM2334H	Stainless steel 316	IP65	68 BRA	SS	600 x 400 x 200	22	Two D2010/11M or D2030M
GM2335H	Stainless steel 316	IP65	68 BRNA	SS	600 x 400 x 200	22	Two D2010/11M or D2030M
GM2336H	Stainless steel 316	IP65	68 SSA	SS	600 x 400 x 200	22	Two D2010/11M or D2030M
GM2337H	Stainless steel 316	IP65	68 SSNA	SS	600 x 400 x 200	22	Two D2010/11M or D2030M



GM2321 Stainless Steel 400x300x200 mm





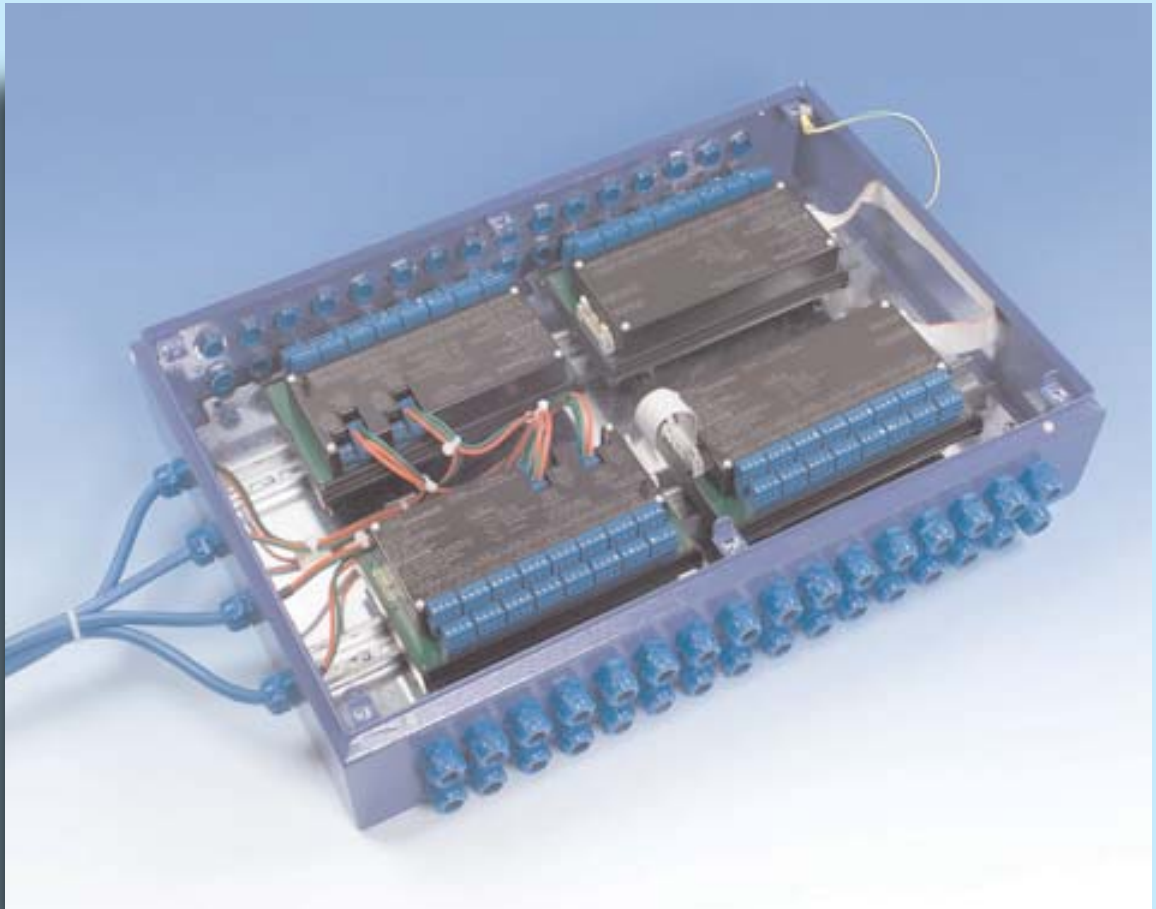
GM2316 Carbon Steel 400x300x120 mm



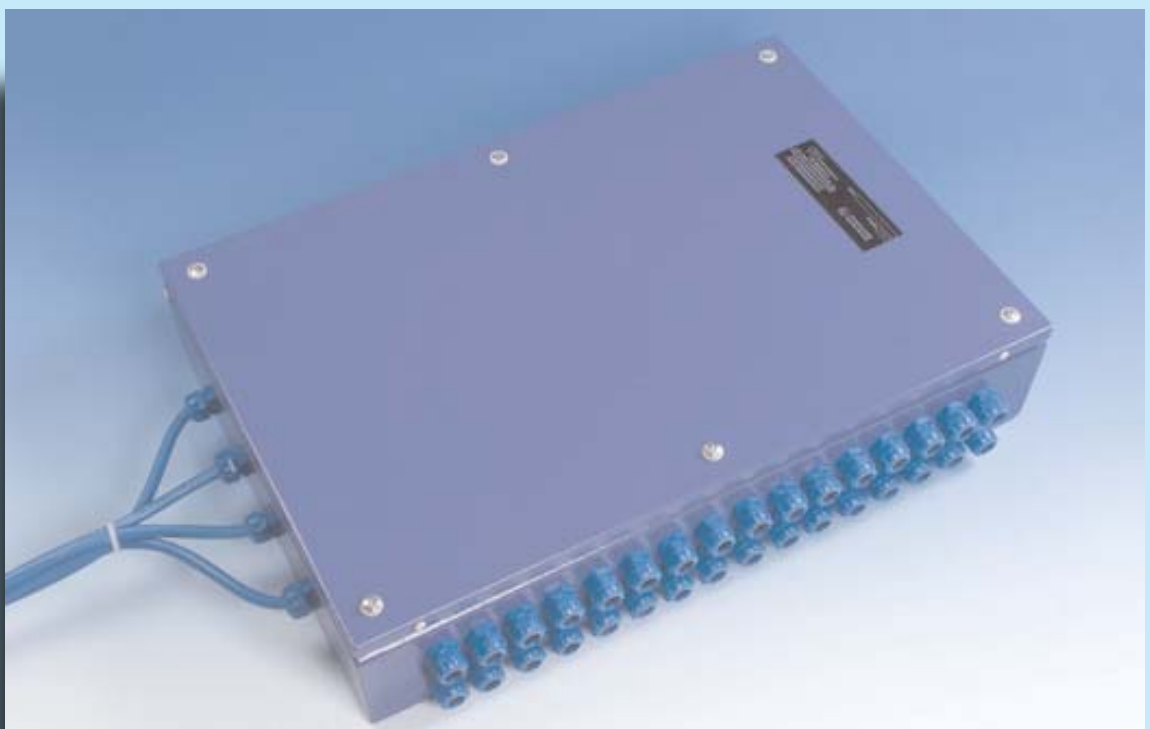


GM2322 Carbon Steel - Flanged - 400x300x120 mm





GM2327 Carbon Steel 600x400x120 mm





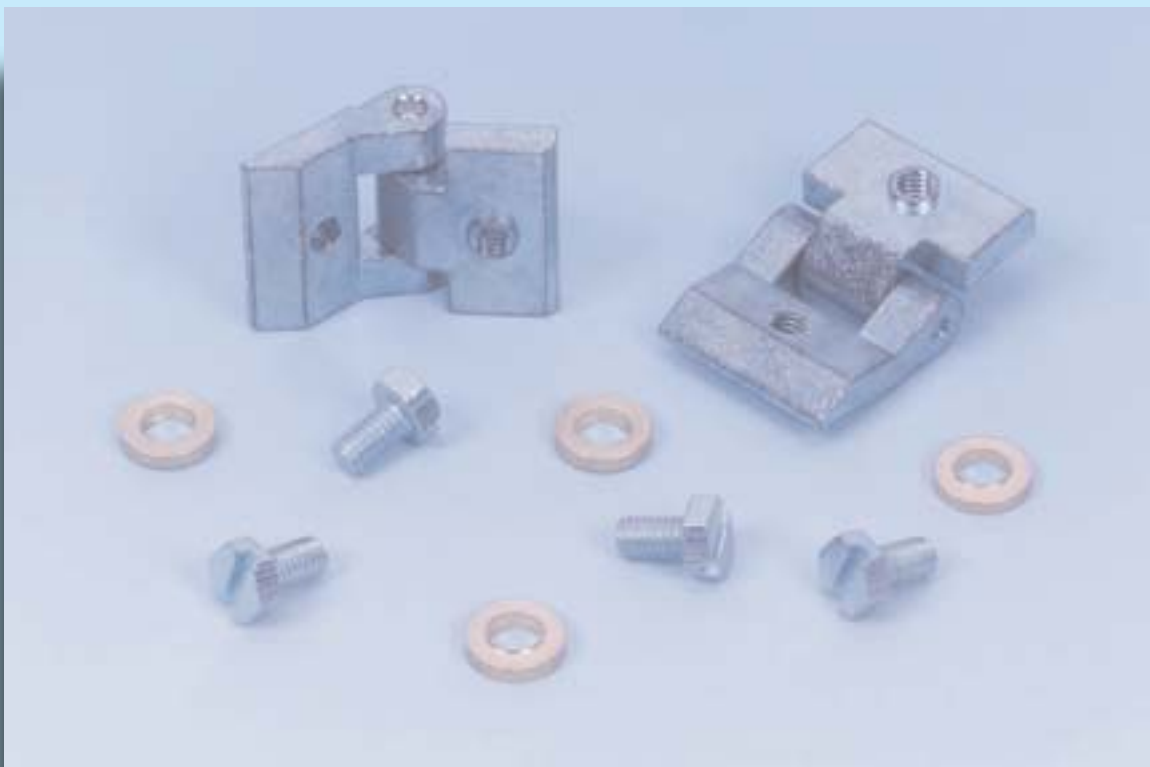
GM2310 Carbon Steel 300x200x120 mm

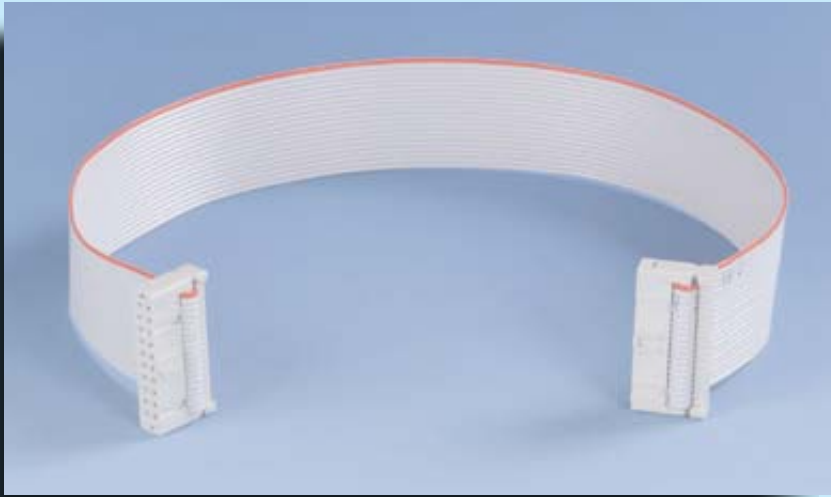




OPT 94: accessories kit for wall mounting

OPT 95: hinge accessories kit for front door





Flat Cable accessories





PPC 2094: optional kit for System Configuration

OPT 2091: optional Terminal Block to be used on channel 16 for Cold Junction Compensation on Thermocouples Input (Units D2010M and D2011M)



Technical Specifications for Cable PN: CABF008

Description: Cable to interconnect D2050 to D2010/D2030 IIC max 1Km or IIB max 5Km

Conductors	stranded plain annealed copper wires to IEC60228 class 2, stranding 7/0.53 mm
Core Identification	Green and Red
Overall Screen	aluminium/polyester tape with metallic surface outside in contact with a tinned copper wire braid
Outer Sheath	PVC flame retardant type, UV and oil resistant, colour blue (I.S.)
Cable Marking	G.M. International ITALY – P.N. CABF008 – 2x1.5 mm ² – Intrinsically Safe FIELDBUS to IEC61158-2 – 31.25 Kbit/s
Outer Diameter	9.8 mm
Net Weight	120 Kg/Km
Voltage Test	1000 Vrms per 1 min. core/core and core/screen
Conductor Resistance	≤ 24.2 Ω/Km at 20 °C in dc
Overall Screen Resistance	≤ 15.0 Ω / Km at 20 °C in dc
Insulation Resistance	≥ 5000 MΩ/Km at 20 °C
Nominal Capacitance	65 nF/Km core/core, 115 nF/Km core/screen
Capacitance Unbalanced to Earth	≤ 2000 pF/Km
Inductance	≤ 0.90 mH/Km
Characteristic Impedance	100 ± 20 Ω at 3 to 20 MHz
Nominal Impedance	100 Ω
Bending Radius	≥ 95 mm repeating bending, ≥ 50 mm single bending
Maximum Tensile Strength	150 N
UV-Resistant	to UL1581 section 1200
Oil Resistance	to ICEA S 61-402
Flame Retardant	to IEC60332-1
Fire Retardant	to IEC60332-3 outer sheath

Note:

The D200M Series multiplexer units need, for safe operation, a cable, between the field units and the gateway, according to the requirements of the standard IEC 60079-27 (FISCO).
Our cable CABF008 fully complies with FISCO specifications.

However G.M. International can evaluate the applicability of cables already in place, if the following information is provided:

- Cable length.
- Core to core capacitance per Km.
- Core to screen capacitance per Km.
- Inductance per Km.
- Loop resistance per Km.
- Nominal Impedance, in the frequency range of 10 to 40 KHz.
- Nominal Attenuation dB/Km, in the frequency range of 10 to 40 KHz.
- Capacitance Unbalanced to Earth in pF/Km.
- Isolation between core/core and core/screen in Vrms.

