DATA SHEET

vibro-meter®

ABA171, ABA172 and ABA173 industrial housings

ABA172 (standard version)

KEY FEATURES AND BENEFITS

- From the vibro-meter® product line
- Robust steel housings
- Lockable hinged door with sealing gasket
- Device-mounting plate with DIN rails
- Cable-entry with openings and plugs
- Available in standard versions and Ex versions certified for use in potentially explosive atmospheres (hazardous areas)
- Material: mild steel for standard versions, stainless steel for Ex versions
- Protection ratings: IP66, IK10 and NEMA types 4, 12 and 13 for standard versions, IP66 and NEMA type 4X for Ex versions
- ABA171 for up to two signal conditioners
- ABA172 for up to four signal conditioners
- ABA173 for up to eight signal conditioners

APPLICATIONS

- Protection for personnel against contact with the enclosed equipment
- Protection for enclosed equipment against dirt, water and mechanical damage

DESCRIPTION

The ABA171, ABA172 and ABA173 Industrial housings provide protection for enclosed equipment against the ingress of solid objects and liquids, and against damage from impacts. In addition, ABA17x industrial housings provide protection for personnel against accidental contact with the enclosed equipment.

They also offer protection against the possible splashing of oil, water or corrosive substances encountered in severe industrial environments, such as offshore or petrochemical applications and are recommended for the mechanical and environmental protection of signal conditioners and/or other electronic devices from Parker Meggitt's vibro-meter® product line.

DESCRIPTION *(continued)*

The main body of an ABA17x industrial housing is manufactured by folding and welding a single piece of steel in order to create a very robust enclosure. The housings feature a protection channel around the door opening, a hinged door with a lock, and a sealing gasket that help ensure protection ratings such as IP66 and NEMA types 4, 4X, 12 and 13.

The standard versions of the ABA17x industrial housing are made from mild steel, pretreated with iron phosphate, and are powder coated for a tough and durable corrosion-resistant finish that is suitable for indoor industrial environments. The Ex versions of the ABA17x for use in potentially explosive atmospheres (hazardous areas) are made from 316L stainless steel (unpainted) and are rated NEMA 4X, in order to provide even better protection against corrosion.

ABA17x industrial housings are supplied with four external mounting brackets that can be assembled on the rear of the housings for safe and easy mounting on walls. As ABA17x doors open within the outer dimensions of the body, housings can be mounted directly next to each another without interference.

In the rear of each ABA17x, there is a galvanised steel device-mounting plate with horizontal DIN rails for the installation of signal conditioners or other devices. If required, the mounting plate can be removed from the housing to facilitate the installation and wiring of equipment.

Note: As the device-mounting plate and DIN rails are electrically conductive (metal), electrically isolating mounting adapters are usually required by signal conditioners or other electronic devices installed in an ABA17x housing in order to help prevent earth (ground) loop problems.

At the bottom of each ABA17x, there are cable-entry holes for routing cables to and from equipment installed in the housing. The standard versions of the ABA17x use a mild steel cable-entry panel for these holes, while the Ex versions incorporate the holes directly in the bottom of the housing. Various cable fittings (stuffing glands) can be ordered for these openings. See Mechanical drawings and ordering information starting on page 6.

The ABA17x industrial housings are supplied with a key for the cabinet lock, wall-mounting brackets and plugs for unused cable entries. In addition, DIN-rail end clamps are supplied in order to physically separate the devices mounted on a DIN rail and ensure that they are electrically isolated. The end clamps also prevent the devices from moving. Optional cable fittings and DIN rail terminal blocks can also be ordered.

For specific applications, contact your local Parker Meggitt representative.

SPECIFICATIONS

Enclosure

Material

- Standard versions (ordering option code A1) : Body and door: mild steel (approx. 1.2 mm).
  Cable-entry panel: mild steel (approx. 1.4 mm).
  Protective coating: Epoxy-polyester powder coating (painted).
  Color: Grey (RAL 7035).
- Ex versions (ordering option code A2) : Body and door: 316L stainless steel.
  Protective coating: None (unpainted).
  Notes:
  The ABA17x's body and the door are electrically connected using threaded studs and an earth strap.
  The cable-entry panel (standard version only) is fixed to the bottom of the housing.

SPECIFICATIONS *(continued)*

Door	: Single door with two hinges and 130° opening. By default, the hinges are right-mounted for a left-opening door but can be left-mounted for a right-opening door.
Lock	: Cabinet lock with 90° movement. Note: One key is provided with each ABA17x.
Seal	
• Standard versions (ordering option code A1)	: Polyurethane gasket
• Ex versions (ordering option code A2)	: Silicone gasket
Device-mounting plate	: Galvanised steel (approx. 2.0 mm). Note: The mounting plate is fixed to the rear of the housing.
Device mounting	: Device-mounting plate at rear of housing with DIN rail or rails (TH 35-15) for mounting signal conditioners or other devices
• ABA171	: One 150 mm (5.9″) DIN-rail and three DIN-rail end clamps
• ABA172	: Two 200 mm (7.9″) DIN-rails and six DIN-rail end clamps
• ABA173	: Two 275 mm (10.8″) DIN-rails and ten DIN-rail end clamps

Input/output and cable fittings (stuffing glands)

Cable entry	
• Standard versions (ordering option code A1)	: Openings for routing cables in a detachable cable-entry panel in the bottom of the housing
• Ex versions (ordering option code A2)	: Openings for routing cables directly in the bottom of the housing
• ABA171	: Four openings
• ABA172	: Eight openings
• ABA173	: Eighteen openings
Cable fittings / stuffing glands (ordering option codes Bxx to Jxx)	
• Material	: Nickel-plated brass
• Type	: See Mechanical drawings and ordering information starting on page 6

Note: An ABA17x is supplied with screw-fit plugs for the openings (holes) for routing cables in the bottom of the housing. Optional cable fittings (stuffing glands) included in an order are supplied separately and must be fitted by the user.

Environmental

Standard versions (ordering option code A1)	
• Operating temperature	: −40 to 80°C (−40 to 176°F)
• Degree of protection provided by housing (according to IEC 60529)	: IP66
• Degree of protection provided by housing against external mechanical impacts (according to IEC 62262)	: IK10
• NEMA enclosure type (according to NEMA 250)	: 4, 12 and 13
Ex versions (ordering option code A2)	
• Operating temperature	: −55 to 100°C (−67 to 212°F)
• Degree of protection provided by housing (according to IEC 60529)	: IP66
• NEMA enclosure type (according to NEMA 250)	: 4X

SPECIFICATIONS *(continued)*

Potentially explosive atmospheres

Available in Ex approved versions for use in hazardous areas (ordering option code A2)

Industrial housings

Type of protection Ex e: increased safety, Ex t: protection by enclosure (ordering option code A2)		
Europe	EC type examination certificate	Ⓔx BVS 23 ATEX E 026 U II 2G (Zones 1, 2) Ex eb IIC Gb II 2D (Zones 21, 22) Ex tb IIIC Db
International	IECEx certificate of conformity	IECEx BVS 23.0016U Ex eb IIC Gb Ex tb IIIC Db
Russian Federation*	EAЭC RU certificate of conformity	EAЭC RU C-CH.АД07.В.02998/21 Ex e IIC Gb U Ex tb IIIC Db U

*Russian Federation marking (EAЭC RU) is not engraved/marked on the products (housings).

Cable fittings (stuffing glands)

Type of protection Ex e: increased safety (ordering option codes Bxx to Jxx)		
Europe	EC type examination certificate	II 2 G/D (Zones 1, 2 / 21, 22) Ex e II / Ex t III
International	IECEx certificate of conformity	II 2 G/D (Zones 1, 2 / 21, 22) Ex e II / Ex t III

⚠ **For specific parameters of the mode of protection concerned and special conditions for safe use, refer to the Ex certificates that are available from Parker Meggitt.**

⚠ **For the most recent information on the Ex certifications that are applicable to this product, refer to the *Ex product register (PL-1511) document* that is available from Parker Meggitt.**

Approvals

Standard versions (ordering option code A1)

- Conformity : European Union (EU) declaration of conformity (CE marking)
- Other : CSA, DNV, GOST, KEMA-KEUR, UL

Ex versions (ordering option code A2)

- Conformity : European Union (EU) declaration of conformity (CE marking)
- Hazardous areas : Ex approved versions
  (see Potentially explosive atmospheres on page 4)

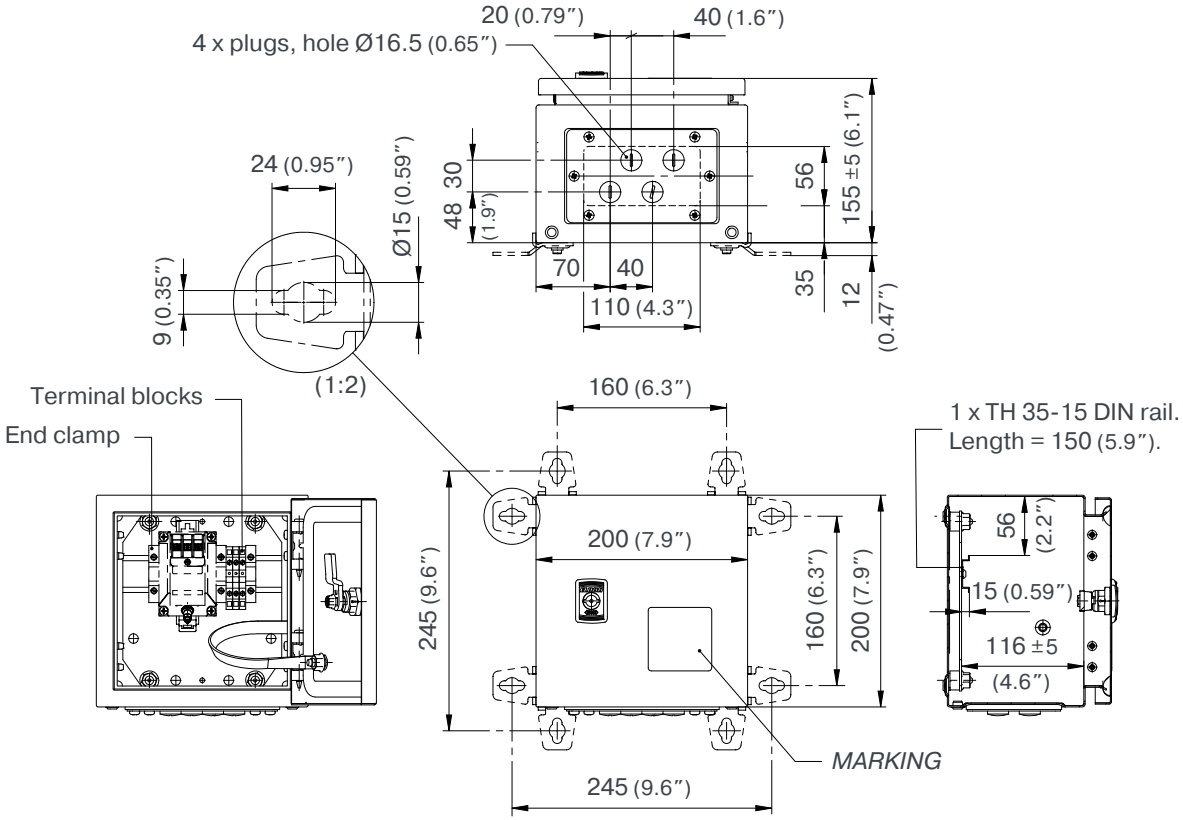
SPECIFICATIONS *(continued)*

Physical

Housing mounting	:	Four mounting holes in the rear of the housing for use with external mounting brackets. The holes are pressed out by 2 mm to allow air to circulate at the rear of the housing. Four 3 mm steel mounting brackets are provided with each ABA17x. Sealing washers are also included to help ensure the environmental protection rating.
Dimensions	:	See Mechanical drawings and ordering information starting on page 6
Weight		
• ABA171	:	3.3 kg (7.3 lb) approx. for standard version (ordering option code A1). 4.25 kg (9.4 lb) approx. for Ex version (ordering option code A2).
• ABA172	:	3.8 kg (8.4 lb) approx. for standard version (ordering option code A1). 6.0 kg (13.2 lb) approx. for Ex version (ordering option code A2).
• ABA173	:	6.6 kg (14.6 lb) approx. for standard version (ordering option code A1). 8.25 kg (18.2 lb) approx. for Ex version (ordering option code A2).

MECHANICAL DRAWINGS AND ORDERING INFORMATION

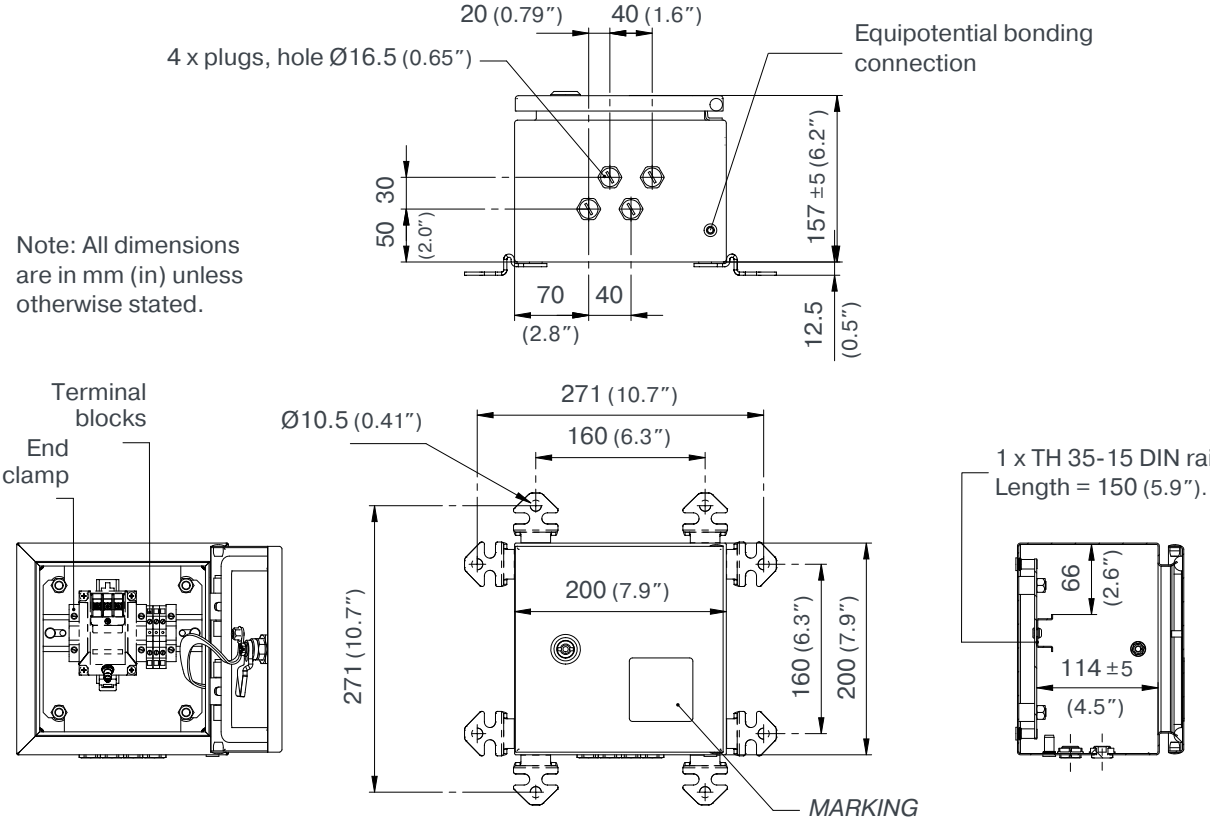
ABA171 – standard version (ordering option code A1)



Note: All dimensions are in mm (in) unless otherwise stated.

MECHANICAL DRAWINGS AND ORDERING INFORMATION *(continued)*

ABA171 – Ex version (ordering option code A2)



Ordering number: 830 - 171 - 000 - 011 – A [ ] – B [ ] [ ] ··· J [ ] [ ] – T [ ] [ ]

Environment (A)	
Standard	1
Explosive (Ex)	2

Terminal blocks (T)	
xx	1 block (3 terminals)

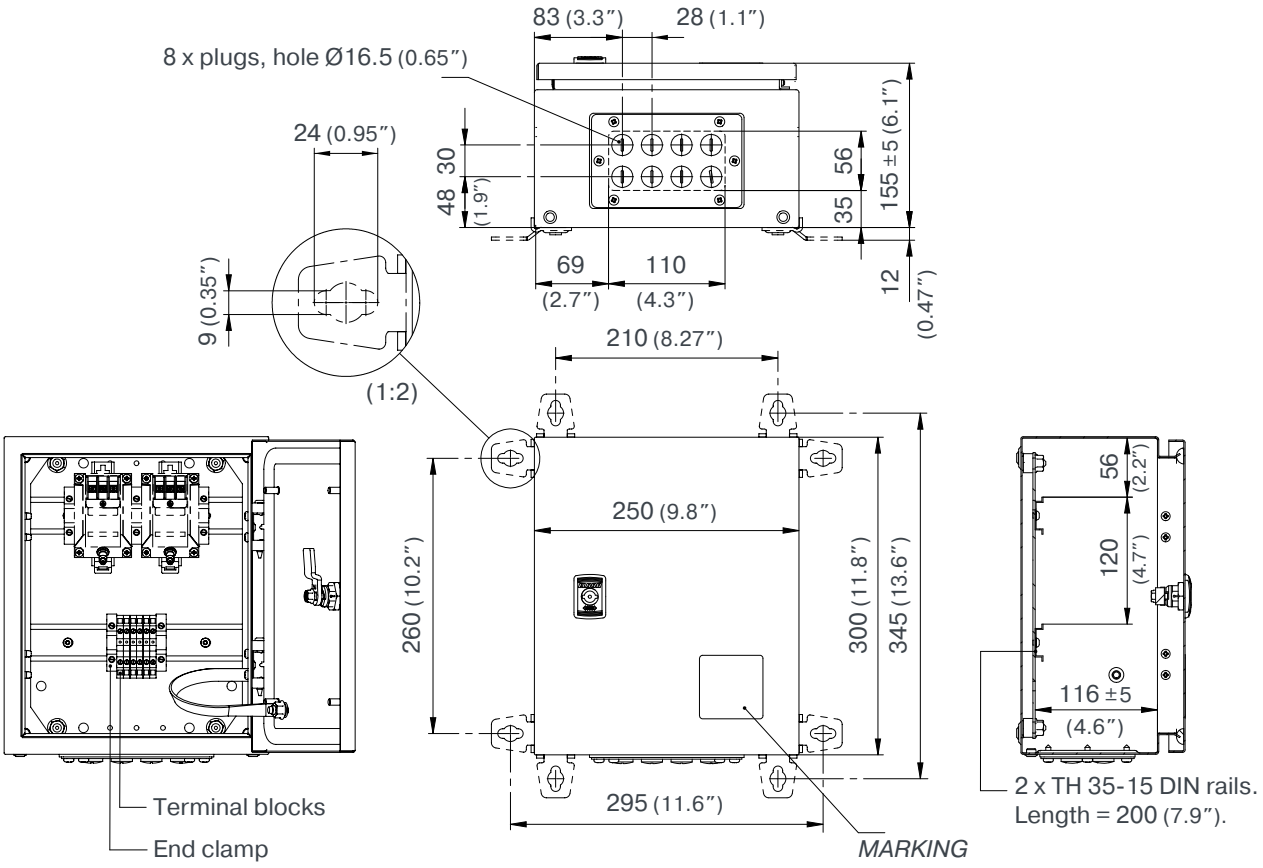
Cable fittings (B to J)	
Cable gland for cable Ø2.5 - Ø3.6 mm	Bxx
Cable gland for cable Ø4 - Ø8 mm	Cxx
Cable gland for cable Ø6 - Ø11 mm	Dxx
Combination cable gland for cable Ø2 - Ø4 mm and flexible protection hose Ø5 - Ø7 mm. *See note 1*.	Exx
Combination cable gland for cable Ø0.7 - Ø2.7 mm and flexible protection hose Ø5 - Ø7 mm. *See note 2*.	Fxx
Combination cable gland for cable Ø2.5 - Ø3.5 mm and flexible protection hose Ø5 - Ø6 mm. *See note 3*.	Gxx
Adapter PG9	Hxx
Cable gland for oblong LS cable (cable 6.3×3.7 mm)	Ixx
Adapter M20×1.5 (cable Ø12 mm max.)	Jxx

Notes:
Use xx to specify the quantities of Cable fittings (B to J) and Terminal blocks (T) required. For example, a complete ordering number is: 830-171-000-011-A1-B00-C02-D00-E02-F00-G00-H00-I00-J00-T00.

1. The E combination cable gland is suitable for use by the TQxx2/EAx02 and TQxx3/EAx03 with a flexible hose (optional protection).
2. The F combination cable gland is suitable for use by the TQx01/EAx01 with a flexible hose (optional protection).
3. The G combination cable gland is suitable for use by the CV210/IVC632 with an ED109 or ED112 cable.

MECHANICAL DRAWINGS AND ORDERING INFORMATION *(continued)*

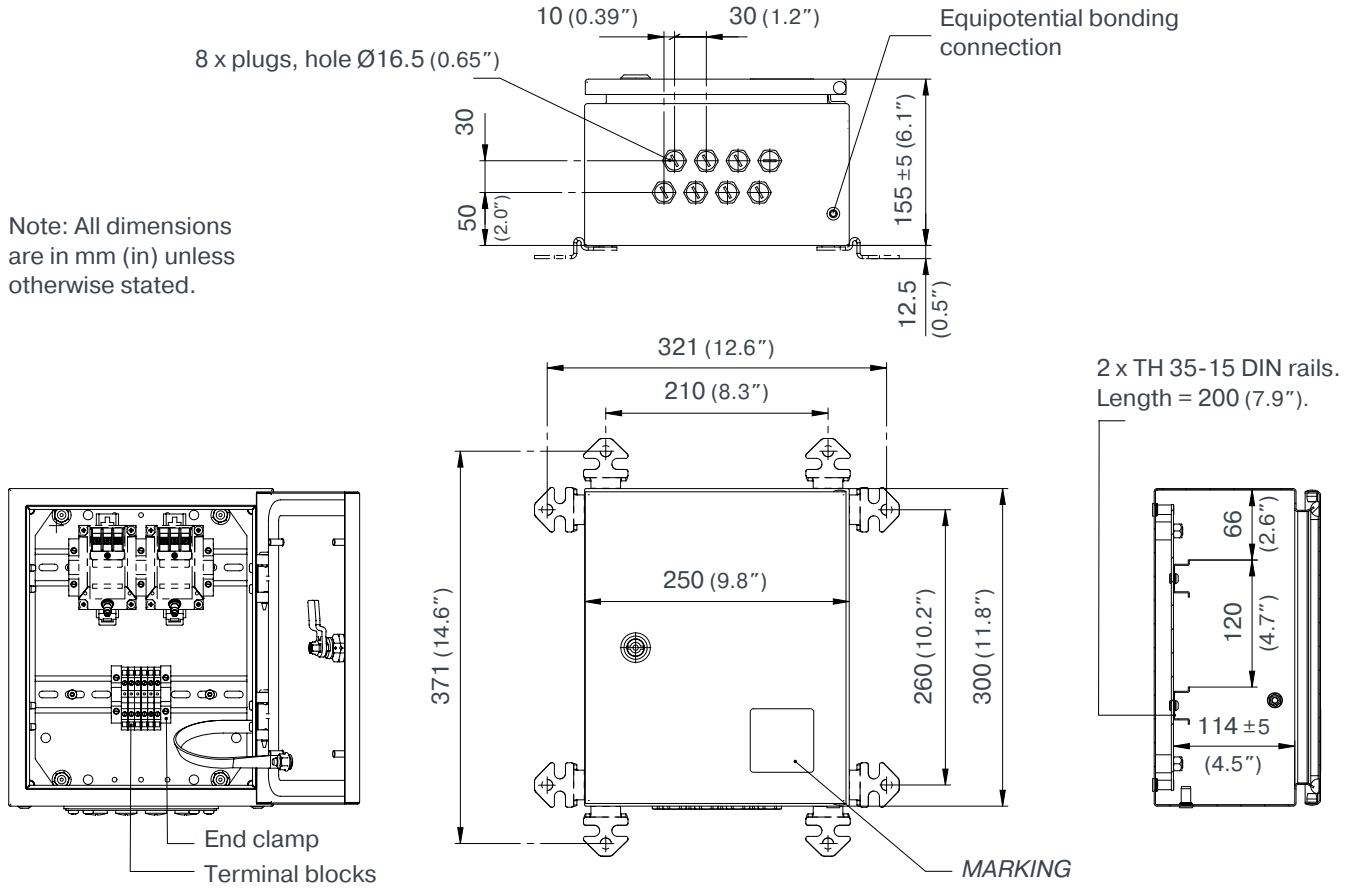
ABA172 – standard version (ordering option code A1)



Note: All dimensions are in mm (in) unless otherwise stated.

MECHANICAL DRAWINGS AND ORDERING INFORMATION *(continued)*

ABA172 – Ex version (ordering option code A2)



Ordering number: 830 - 172 - 000 - 011 – A □ – B □ □ ··· J □ □ – T □ □

Environment (A)	
Standard	1
Explosive (Ex)	2

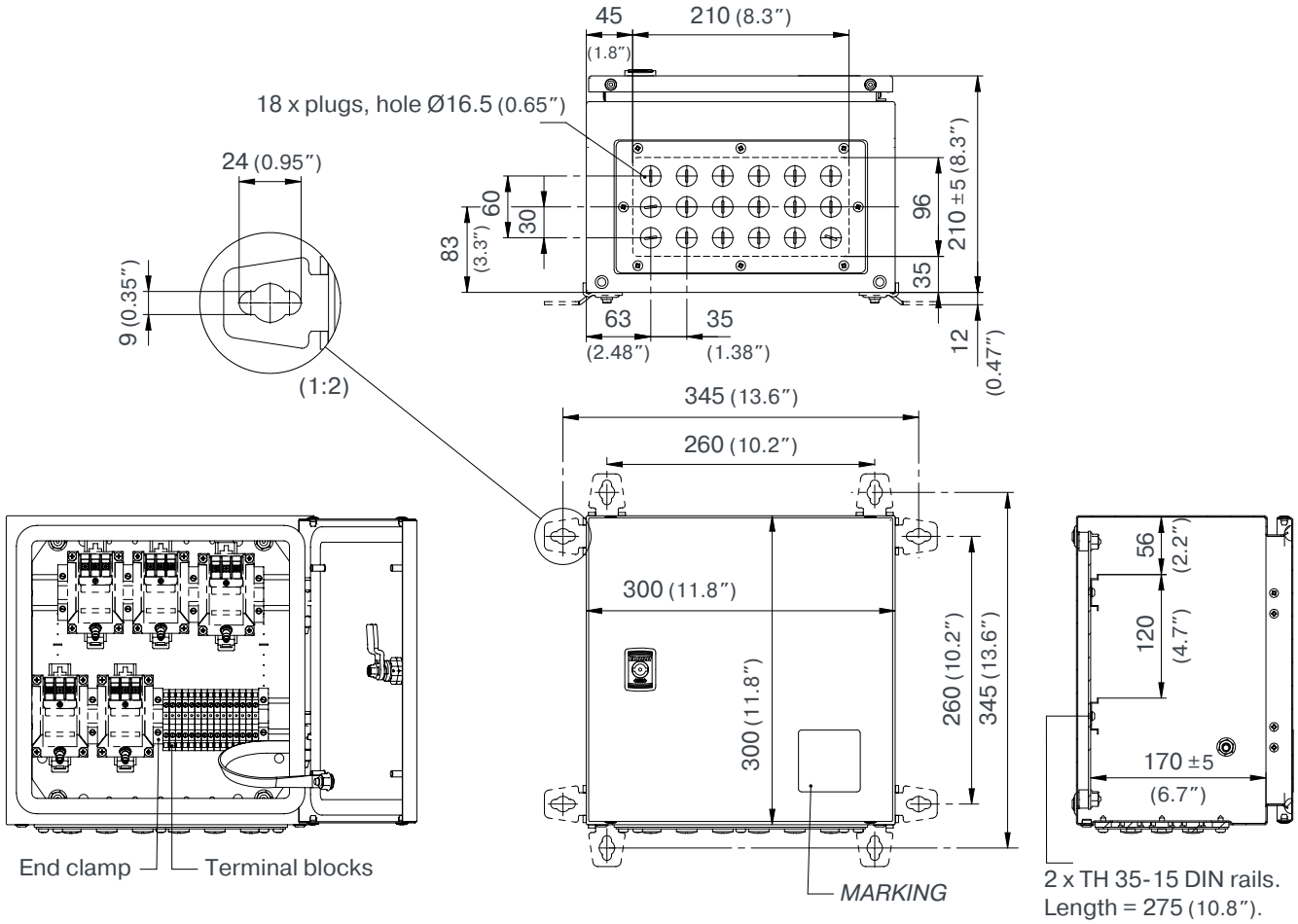
Terminal blocks (T)	
xx	1 block (3 terminals)

Cable fittings (B to J)	
Cable gland for cable Ø2.5 - Ø3.6 mm	Bxx
Cable gland for cable Ø4 - Ø8 mm	Cxx
Cable gland for cable Ø6 - Ø11 mm	Dxx
Combination cable gland for cable Ø2 - Ø4 mm and flexible protection hose Ø5 - Ø7 mm. *See note 1*.	Exx
Combination cable gland for cable Ø0.7 - Ø2.7 mm and flexible protection hose Ø5 - Ø7 mm. *See note 2*.	Fxx
Combination cable gland for cable Ø2.5 - Ø3.5 mm and flexible protection hose Ø5 - Ø6 mm. *See note 3*.	Gxx
Adapter PG9	Hxx
Cable gland for oblong LS cable (cable 6.3×3.7 mm)	Ixx
Adapter M20×1.5 (cable Ø12 mm max.)	Jxx

Notes:
Use xx to specify the quantities of Cable fittings (B to J) and Terminal blocks (T) required. For example, a complete ordering number is: 830-172-000-011-A1-B00-C04-D00-E04-F00-G00-H00-I00-J00-T00.
1. The E combination cable gland is suitable for use by the TQxx2/EAx02 and TQxx3/EAx03 with a flexible hose (optional protection).
2. The F combination cable gland is suitable for use by the TQx01/EAx01 with a flexible hose (optional protection).
3. The G combination cable gland is suitable for use by the CV210/IVC632 with an ED109 or ED112 cable.

MECHANICAL DRAWINGS AND ORDERING INFORMATION *(continued)*

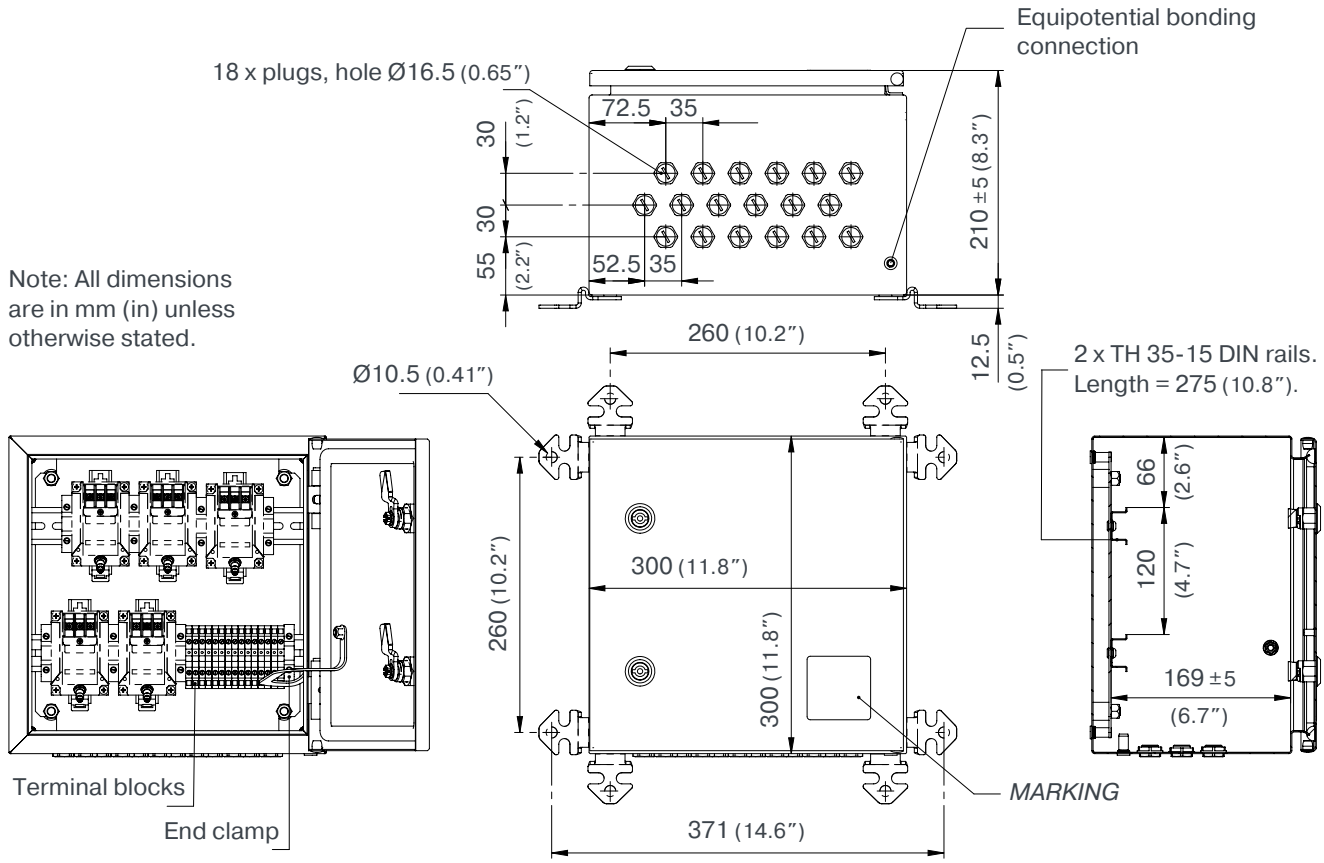
ABA173 – standard version (ordering option code A1)



Note: All dimensions are in mm (in) unless otherwise stated.

MECHANICAL DRAWINGS AND ORDERING INFORMATION *(continued)*

ABA173 – Ex version (ordering option code A2)



Note: All dimensions are in mm (in) unless otherwise stated.

Ordering number: 830 - 173 - 000 - 011 – A □ B □ □ ··· J □ □ T □ □

Environment (A)	
Standard	1
Explosive (Ex)	2

Terminal blocks (T)	
xx	1 block (3 terminals)

Cable fittings (B to J)	
Cable gland for cable Ø2.5 - Ø3.6 mm	Bxx
Cable gland for cable Ø4 - Ø8 mm	Cxx
Cable gland for cable Ø6 - Ø11 mm	Dxx
Combination cable gland for cable Ø2 - Ø4 mm and flexible protection hose Ø5 - Ø7 mm. *See note 1*.	Exx
Combination cable gland for cable Ø0.7 - Ø2.7 mm and flexible protection hose Ø5 - Ø7 mm. *See note 2*.	Fxx
Combination cable gland for cable Ø2.5 - Ø3.5 mm and flexible protection hose Ø5 - Ø6 mm. *See note 3*.	Gxx
Adapter PG9	Hxx
Cable gland for oblong LS cable (cable 6.3×3.7 mm)	Ixx
Adapter M20×1.5 (cable Ø12 mm max.)	Jxx

Notes:

Use xx to specify the quantities of Cable fittings (B to J) and Terminal blocks (T) required. For example, a complete ordering number is: 830-173-000-011-A1-B00-C08-D00-E08-F00-G00-H00-I00-J00-T00.

1. The E combination cable gland is suitable for use by the TQxx2/EAx02 and TQxx3/EAx03 with a flexible hose (optional protection).
2. The F combination cable gland is suitable for use by the TQx01/EAx01 with a flexible hose (optional protection).
3. The G combination cable gland is suitable for use by the CV210/IVC632 with an ED109 or ED112 cable.

Parker Hannifin Corporation – usually referred to as just Parker – is a global leader in motion and control technologies, providing precision-engineered solutions for a wide variety of mobile, industrial and aerospace markets. For more than a century the company has been enabling engineering breakthroughs that lead to a better tomorrow.

Parker Meggitt joined the Parker Aerospace Group in September 2022 following the successful acquisition of Meggitt PLC, a world leader in aerospace, defense and energy. This includes the Meggitt facility in Fribourg, Switzerland, operating as the legal entity Meggitt SA (formerly Vibro-Meter SA). Accordingly, the vibro-meter® product line is now owned by Parker.

Sales offices and distributors

Parker has sales offices and distributors all around the world. For information on your local contact, please visit our website.

Local representative

Parker Meggitt (Meggitt SA) office

Parker Meggitt,
Motion, Power & Sensing Division (MPSD).
Meggitt SA, Route de Moncor 4, Case postale,
1701 Fribourg, Switzerland.
www.meggittsensing.com/energy
www.meggitt.com
www.parker.com