

Wellhead Junction Box

Enables venting of gas that migrates from downhole cables so it does not reach the variable speed drive

Ambient temperature rating:
–40 to 70 degC [–40 to 158 degF]

Dimensions:
520 × 520 × 230 mm
[20.5 × 20.5 × 9 in]

Applications

Oilfield artificial lift applications on land

How it improves wells

Small amounts of gas can migrate up downhole cables used to power artificial lift equipment in oilfield applications. The wellhead junction box is used for electrical power surface connections, enabling the gas to be vented and preventing it from reaching variable speed drives (VSD) or switchboards.

How it works

Custom-designed for oilfield applications, the high-voltage wellhead junction box features six louvered vents, two drainholes, and three 5-kV insulator standoffs. Three-phase cables are connected at the three sets of 6 AWG to 350-kcmil [185-mm²] double-barrel lugs.

What it replaces

Junction boxes that do not have relevant ANSI, UL, and CSA safety certifications

Additional features

- One 14 AWG through 2/0 AWG double-barrel lug inside the enclosure for ground installation
- One 4 AWG through 3/0 AWG single-barrel lug outside the enclosure for ground installation
- 35-mm rail-mounted provision for anticondensation heater



High-voltage wellhead junction box.

Certifications

- ANSI/UL 1332 Certified Paint, DTOV2
- ANSI/UL 157 Certified Gasket, JMST23
- ANSI/UL 94 Flammability V-2 rated
- CSA 22.2 No. 94-M91 Clause 6.13.3, Resistance to Impact
- ANSI/UL 67/891 Certified Insulators, QEUY2
- ANSI/UL 486A/B Certified Lugs, ZMVV
- Class C321111 Industrial Control Equipment, Enclosures for Electrical Equipment
- Class C321191 Industrial Control Equipment, Enclosures for Electrical Equipment: US Requirements
- CSA C22.2 No. 94.1/UL50, Enclosures for Electrical Equipment, Nonenvironmental Considerations
- CSA C22.2 No. 94.2-15/UL50E, Enclosures for Electrical Equipment, Environmental Considerations
- Class C464130 Switch Gear, Subassemblies, Components Acceptance
- Class C464190 Switch Gear, Subassemblies, Components Acceptance: Certified to US Standards
- CSA C22.2 No. 31-14, Switchgear Assemblies

Wellhead Junction Box Standard Specifications

Enclosure type	High voltage, 5-kV AC
Ingress protection	CSA Type 3R [†]
Material	14-gauge [2-mm] cold-rolled steel
Ambient temperature rating	–40 to 70 degC [–40 to 158 degF]
Maximum terminations	Three conductors for three-phase cables
Earthing	Studs on enclosure and gland plates
Dimensions, width × height × depth	520 × 520 × 230 mm [20.5 × 20.5 × 9 in]
Area classification	Class 1, Division 2 outdoor nonhazardous

[†] Indoor or outdoor use. Provides a degree of protection against rain and snow; undamaged by the external formation of ice on the enclosure..