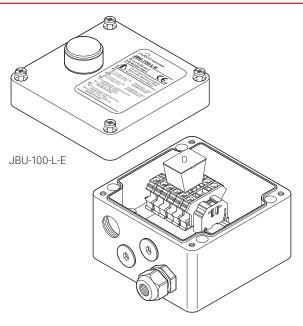
# JBU-100



# CONNECT AND PROTECT

# Junction box for modular system $\langle E_x \rangle$

## **PRODUCT OVERVIEW**



The nVent JBU-100 kit is designed to connect power to up to three nVent RAYCHEM BTV, QTVR, XTVR, HTV or VPL industrial parallel heating cables.

Innovative Spring-type terminals provide fast installation and safe, reliable, maintenance-free operation.

The box is part of the modular component system, it allows for maximum flexibility and can be either wall or pipe mounted.

Connection kits (M25) and insulation entry kits have to be ordered separately. The box is offered in two basic versions customised to local installation practices.

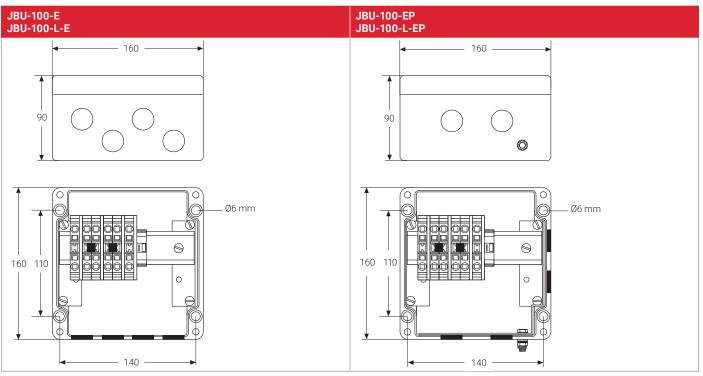
All kits are also available as a lighted version (-L). These include a unique light module with a superbright green LED that simply plugs into the terminals, and a lens in the lid. This provides indication that power is available in the box.

#### Description

JBU-100-E JBU-100-L-E	JBU-100-EP JBU-100-L-EP
This box is certified for use in IEC regions and provides four M25 threaded entries, stopping plugs and one plastic power cable gland.	This box is certified for use in IEC regions and provides four M25 threaded entries, an earthing plate and an external earth stud. It is designed for use with armoured power cables.
Kit contents	
1 junction box with terminals	1 junction box with terminals with earth plate and external earth stud
1 light module (for -L only)	1 light module (for -L only)
1 M25 gland for power cable 8-15 mm in diameter (temperature range −55°C to +70°C)	2 M25 stopping plugs
2 M25 stopping plugs	

# **PRODUCT SPECIFICATIONS**

# Dimensions (in mm)



# **Technical details**

	JBU-100-E JBU-100-L-E	JBU-100-EP JBU-100-L-EP
Ingress protection	IP66	IP66
Entries	4 x M25	4 x M25
Ambient temperature range	−55°C to +56°C <sup>(1)</sup> (JBU-100-E) −40°C to +40°C (JBU-100-L-E)	-55°C to +56°C <sup>(1)</sup> (JBU-100-EP) -40°C to +40°C (JBU-100-L-EP)
Terminals	Spring-type terminals	Spring-type terminals
	2 phase, 2 neutral, 2 protective earth	2 phase, 2 neutral, 2 protective earth
Max. conductor size	10 mm <sup>2</sup> stranded, 10 mm <sup>2</sup> solid	10 mm <sup>2</sup> stranded, 10 mm <sup>2</sup> solid
Max. operation voltage	480* Vac	480* Vac
	* JBU-100-L-E and JBU-100-L-EP are limited to 277 Vac. Extra conditions for safe use apply for voltages higher than 277 Vac. Please refer to the certificate or installation instructions for full details.	
Max. current rating <sup>(2)</sup>	53 A	53 A

(1) Extra conditions for safe use apply for ambient temperatures above +40°C. Temperature resistant power cable and metal glands must be used. Please refer to the certificate or installation instructions for full details.

<sup>(2)</sup> For pipe temperature > 150°C and < 260°C and XTVR or HTV heating cables, the maximum operating current shall be reduced to maximum 20 A. Refer to heating cable specification for the maximum pipe temperature.

## Materials of construction

Enclosure, lid	Electrostatic charge-resistant glass-filled engineered polymer, black	Electrostatic charge-resistant glass-filled engineered polymer, black
Lid screws	Stainless steel	Stainless steel
Lid gasket	Silicone rubber	Silicone rubber
Earth continuity plate	N/A	Steel, zinc plated, and blue chromated

#### **Optional LED indicator light**

Colour	Green	Green
Voltage rating	100-277 Vac	100-277 Vac
Power consumption	< 1 W	< 1 W

## **APPROVALS**

For use in ordinary and hazardous area Zone 1 and Zone 2 (Gas), Zone 21 and Zone 22 (Dust) and Class I Zone 1

# Temperature classification

Temperature classification is defined by the complete system.

#### Product certification



More details about product certification, approvals and conditions of safe use are available in the installation manual at www.nVent.com/RAYCHEM.

## **ORDERING INFORMATION**

#### Junction box

Part Description (**)	JBU-100-E	JBU-100-EP
PN (Weight)	051976-000 (1.7 kg)	243948-000 (1.8 kg)

#### Junction box with light

Part Description	JBU-100-L-E	JBU-100-L-EP
PN (Weight)	069262-000 (2.1 kg)	113974-000 (2.2 kg)

#### Accessories

Heating cable connection kits	C25-100, C25-21, CCON25-100	C25-100, C25-21, CCON25-100, C25-100- METAL, C25-100-METAL-NP (Nickel plated brass), C25-100-METAL-SS (stainless steel)
Insulation entry kit	IEK-25-04 or IEK-25-PIPE	IEK-25-04 or IEK-25-PIPE
Power cable gland	GL-55-M25 hazardous area approved gland for cables 8-15 mm (temperature range -55°C to +70°C) GL-36-M25 hazardous area approved gland for cables 8-17.5 mm (temperature range -20°C to +70°C)	GL-38-M25-METAL (optional)
Junction box support bracket (optional)	SB-100, SB-101	SB-100, SB-101

(\*\*) Localized versions may exist with limited approvals and different part numbers. Contact your local sales representative.

#### **North America**

Tel +1.800.545.6258 Fax +1.800.527.5703 thermal.info@nVent.com

#### Europe, Middle East, Africa

Tel +32.16.213.502 Fax +32.16.213.604 thermal.info@nVent.com

#### **Asia Pacific**

Tel +86.21.2412.1688 Fax +86.21.5426.3167 cn.thermal.info@nVent.com

# **Latin America**

Tel +1.713.868.4800 Fax +1.713.868.2333 thermal.info@nVent.com



Our powerful portfolio of brands: CADDY ERICO HOFFMAN RAYCHEM SCHROFF TRACER

©2023 nVent. All nVent marks and logos are owned or licensed by nVent Services GmbH or its affiliates. All other trademarks are the property of their respective owners nVent reserves the right to change specifications without notice.