FM Approvals
Member of the FM Global Group

FM Approvals
1151 Boston Providence Turnpike
P.O. Box 9102 Norwood, MA 02062 USA
T: **781 762 4300** F: 781-762-9375 www.fmapprovals.com

CERTIFICATE OF COMPLIANCE

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

JBBS-49SC-ab1c. Junction Brick.
JBBS-48SC-ab1c. Junction Brick.
NI-ANI / I / 2 / CD / T6 Ta = 70°C — NI-2.401; NIFW; Type 4X
Nonincendive Field Wiring Parameters:
Rectangular Characteristic

V_{oc} = 30 V	I_{sc} = 63 mA	P_o = 1.89W	C_a = 0.06 µF	L_a = 1 mH
		Or		
V_{oc} = 28 V	I_{sc} = 63 mA	P_o = 1.76W	C_a = 0.1 µF	L_a = 1 mH

a = Connector style: E or M.
b = Number of spurs: 4, 6 or 8.
c = Connector material: 3 or 4.

Special Conditions of Use:

1) *When the installation of the Junction Brick is a wiring method other than nonincendive field wiring, then the Junction Brick may be used in Group A/ B areas, using the Approved lokfast Guard and ITC or PLTC cable types as defined by the NEC®.*

JTBS-49SC-ab3c. Junction Brick.
JTBS-48SC-ab3c. Junction Brick.
NI-ANI / I / 2 / CD / T5 Ta = 80°C — NI-2.401; NIFW; Type 4X
Nonincendive Field Wiring Parameters:
Rectangular Characteristic

V_{oc} = 30 V	I_{sc} = 63 mA	P_o = 1.89W	C_a = 0.06 µF	L_a = 1 mH
		Or		
V_{oc} = 28 V	I_{sc} = 63 mA	P_o = 1.76W	C_a = 0.1 µF	L_a = 1 mH

a = Connector style: E or M.
b = Number of spurs: 4, 6 or 8.
c = Connector material: 3 or 4.

Special Conditions of Use:

1) *When the installation of the Junction Brick is a wiring method other than nonincendive field wiring, then the Junction Brick may be used in Group A/ B areas, using the Approved lokfast Guard and ITC or PLTC cable types as defined by the NEC®.*

Equipment Ratings:

Nonincendive for use in Class I, Division 2, Groups A, B, C, & D; indoor/ outdoor hazardous (classified) location, utilizing Type 4X enclosure with a Temperature Class T6, T5 Ta = 70°C, Ta = 80°C and Nonincendive field wiring with connection to Class I, Division 2, Groups C & D hazardous (classified) location in accordance with control drawing NI-2.401

This certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

Class 3600	1998
Class 3611	1999
Class 3810	1989

JBBS-25-a61b. Junction Brick.
JBBS-25SC-a61b. Junction Brick.
JBBS-25-a81b. Junction Brick.
NI / I / 2 / ABCD / T4 Ta = 80°C; Type 4X
a = Connector style: E or M.
b = Connector material: 3 or 4.

Special Conditions of Use:
1) *All cabling drops must be ITC or PLTC cable types as defined by the NEC®, using the Approved lokfast Guard.*
2) *Use Turck installation drawing NI-2.401 in addition to NEC®*

JTBS-a-bc3d. Junction Brick.
JTBS-57VM-cd3e. Junction Brick.
NI / I / 2 / ABCD / T5 Ta = 80°C; Type 4X
a = Bus standard: 48 or 49.
b = Connector style: E or M.
c = Number of spurs: 4 or 6.
d = Connector material: 3 or 4.

Special Conditions of Use:
1) *All cabling drops must be ITC or PLTC cable types as defined by the NEC®, using the Approved lokfast Guard.*
2) *Use Turck installation drawing NI-2.401 in addition to NEC®*

JBBS- a-bc1d. Junction Brick.
NI / I / 2 / ABCD / T5 Ta = 80°C; Type 4X
a = Bus standard: 48 or 49.
b = Connector style: E or M.
c = Number of spurs: 4, 6, or 8.
d = Connector material: 3 or 4.

Special Conditions of Use:
1) *All cabling drops must be ITC or PLTC cable types as defined by the NEC®, using the Approved lokfast Guard.*
2) *Use Turck installation drawing NI-2.401 in addition to NEC®*

Equipment Ratings:

Nonincendive for use in Class I, Division 2, Groups A, B, C, & D; indoor/ outdoor hazardous (classified) location, utilizing Type 4X enclosure with a Temperature Class T5, Ta = 80°C

This certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

Class 3600	1998
Class 3611	1999
Class 3810	1989
NEMA 250	1991

JRBS-49SC-8 Series Fieldbus Junction.
NI / I / 2 / ABCD / T4 Ta = 70°C
NI-ANI / I / 2 / CD / T4 Ta = 70°C — NI-2.401; Rectangular output characteristic-NIFW*
*For Nonincendive Field Wiring Parameters, refer to the relevant control drawings.

Special Conditions of Use:

1) *When using a Division 2 wiring methods as defined by the NEC® other than nonincendive field wiring, then this Fieldbus Junction may be installed in Group A/ B areas.*
2) *The Fieldbus Junction shall be installed in a tool secured enclosure in compliance with the mounting, spacing and segregation requirements of the ultimate application.*

JRBS-49SC-aR Series Fieldbus Junction
NI / I / 2 / ABCD / T4; -25 °C ≤ Ta ≤ +70 °C
NI-ANI / I / 2 / CD / T4; -25 °C ≤ Ta ≤ +70 °C – NI-2.410; Rectangular output characteristic-NIFW*
a = Number of spurs: 4, 6, 8, 10, or 12
*For Nonincendive Field Wiring Parameters, refer to the relevant control drawings.

Special Conditions of Use:

1) *Shall be installed in compliance with the enclosure, mounting, spacing and segregation requirements of the ultimate application, including a tool removable cover.*
2) *When using a Division 2 wiring methods as defined by the NEC® other than nonincendive field wiring, then this Fieldbus Junction may be installed in Group A/B areas.*

Equipment Ratings:

Nonincendive for use in a Class I, Division 2, Groups A, B, C, & D Hazardous (Classified) Locations and Nonincendive for use in a Class I, Division 2, Groups C & D Hazardous (Classified) Locations with Nonincendive field wiring. Temperature Class T4, Ta = 70°C

FM Approvals®

Member of the FM Global Group

This certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

Class 3600	1998
Class 3611	2004
Class 3810	2005

FM Approved for:

Turck Inc.
Plymouth, MN

Original Project ID: 3010019 Approval Granted: March 25, 2002

Subsequent Revision Reports / Date Approval Amended

Report Number	Date	Report Number	Date
3014899	March 12, 2003		
3021333	September 14, 2004		
3029339	April 17, 2007		
3031562	January 28, 2008		
3033040	January 26, 2009		

FM Approvals LLC

J. E. Marquedant
Group Manager, Electrical

26 January 2009
Date