CERTIFICATE OF CONFORMITY



1. HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS

2. **Certificate No:**

3.

4.

Equipment:

(Type Reference and Name)

FM17US0047X

Listing - 1

Intrinsically Safe Junction Boxes

Listing - 2

Minifast Process Wiring

Listing – 3

Eurofast, Multifast, V-Fast, & Minifast Process Wiring

Listing – 4, 5

Minifast Process Wiring MC-HL or TC-ER-HL Extensions

Turck Inc.

Address of Listing Company: 5.

Name of Listing Company:

3000 Campus Drive

Plymouth, MN 55441

USA

6. The examination and test results are recorded in confidential report number:

3018125 dated 9th January 2004

7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

Listing - 1, 5

FM Class 3600:2018, FM Class 3610:2015, FM Class 3610:2018, FM Class 3611:2018, FM Class 3615:2018, FM Class 3810:2018, ANSI/UL 61010-1:2012, ANSI/UL 121201:2017

Listings - 2, 3, 4

FM Class 3600:2018, FM Class 3611:2018, FM Class 3810:2018, ANSI/UL 61010-1:2012, ANSI/UL 121201:2017

- If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific 8. conditions of use specified in the schedule to this certificate.
- 9. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.

Certificate issued by:

J./E. Marquedant

VP, Manager - Electrical Systems

20 April 2020

Date

To verify the availability of the Approved product, please refer to www.approvalguide.com

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com

F 347 (Mar 16) Page 1 of 13



US Certificate Of Conformity No: FM17US0047X

10. Equipment Ratings:

Listing - 1

Intrinsically Safe for use in Class I, II, III, Division 1, Groups A, B, C, D, E, F, & G; Class I, Zone 0, Group IIC; Nonincendive for use in Class I, Division 2, Groups A, B, C & D; Class I, Zone 2, Group IIC hazardous (classified) locations, in accordance with control drawing QCF-00147.

Listing - 2

Nonincendive for use in Class I, II, Division 2, Groups A, B, C, D, E, F, & G; Class I, Zone 2, Group IIC hazardous (classified) locations, in accordance with control drawing QCF-00147, NI-2.407, or NI-2.417.

Listing - 3, 4

Nonincendive for use in Class I, Division 2, Groups A, B, C, & D; Class I, Zone 2, Group IIC hazardous (classified) locations, in accordance with control drawing QCF-00147.

Listing - 5

Special Protection for use in Class I, II, III, Division 1, Groups A, B, C, D, E, F, G; Class I, II, Division 2, Groups A, B, C, D, E, F, G hazardous (classified) locations, in accordance with control drawing QCF-00147.

11. The marking of the equipment shall include:

Listing - 1

Class I, II, III, Division 1, Groups A, B, C, D, E, F, G; T6 Ta = -40°C to +80°C;

Class I, Zone 0, Groups IIC; T6 Ta = -40° C to $+80^{\circ}$ C;

Class I, Division 2, Groups A, B, C, D; T6 Ta = -40°C to +80°C;

Class I, Zone 2, Groups IIC; T6 Ta = -40°C to +80°C;

Listing - 2

Class I, II, Division 2, Groups A, B, C, D, E, F, G; T6 Ta = -40°C to +80°C;

Class I, Zone 2, Groups IIC; T6 Ta = -40°C to +80°C;

Listing - 3, 4

Class I, Division 2, Groups A, B, C, D; T6 Ta = -40° C to $+80^{\circ}$ C;

Class I, Zone 2, Groups IIC; T6 Ta = -40° C to $+80^{\circ}$ C;

Listing – 5

Class I, II, III, Division 1, Groups A, B, C, D, E, F, G; T6 Ta = -40° C to $+80^{\circ}$ C;

Class I, II, Division 2, Groups A, B, C, D, E, F, G; T6 Ta = -40°C to +80°C;

12. Description of Equipment:

General - The Process Wiring System is an interface wiring system designed to interconnect nonincendive equipment or intrinsically safe apparatus in hazardous locations with associated apparatus or control equipment. The system is comprised of multi-port junction boxes, device receptacles, molded quick-disconnect cordsets, connector guards, conduit body adapters, and accessories. The use of the connector guards (trademarked Lokfast by the manufacturer) and ITC-rated cabling enable the use of quick-disconnect connector technology in hazardous locations.

Model Codes

Listing - 1

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com

F 347 (Mar 16) Page 2 of 13



Member of the FM Global Group

US Certificate Of Conformity No: FM17US0047X

Intrinsically Safe Junction Boxes

Model No.	Description
P-4 RKFa 40-CSa12h	Metal enclosure, 4 minifast ports, multifast home-run connector
P-8 RKFa 40-CSa19h	Metal enclosure, 8 minifast ports, multifast home-run connector
P-4 RKFa 40-bf-c-dh	Metal enclosure, 4 minifast ports, integral home-run cable
P-8 RKFa 40-bf-c-eh	Metal enclosure, 8 minifast ports, integral home-run cable
P-VBMa 40-CSa12	Metal enclosure, 4 eurofast ports, multifast home-run connector
P-VBMa 80-CSa19	Metal enclosure, 8 eurofast ports, multifast home-run connector
P-VBMa 40-bf-c-dg	Metal enclosure, 4 eurofast ports, integral home-run cable
P-VBMa 80-bf-c-eg	Metal enclosure, 8 eurofast ports, integral home-run cable
P-4MBa12-4-CSa12	Molded plastic enclosure, 4 eurofast ports, multifast home-run connector
P-8MBa12-4-CSa19	Molded plastic enclosure, 8 eurofast ports, multifast home-run connector
P-4MBa12-4-bf-c-dg	Molded plastic enclosure, 4 eurofast ports, integral home-run cable
P-8MBa12-4-bf-c-eg	Molded plastic enclosure, 8 eurofast ports, integral home-run cable
P-4 RKFa 40-RSa10h	Metal enclosure, 4 minifast ports, multifast home-run connector
P-8 RKFa 40-RSa19h	Metal enclosure, 8 minifast ports, multifast home-run connector
P-4 RKFa 40-bf-c-dgh	Metal enclosure, 4 minifast ports, integral home-run cable
P-8 RKFa 40-bf-c-egh	Metal enclosure, 8 minifast ports, integral home-run cable

- a = Material: V or blank.
- b = 3 or 4-digit ITC cable number.
- c = Cable length in meters.
- d = Molded receptacle: CSM12, CSMV12, CSML12, CSMT12 or blank.
- e = Molded receptacle: CSM19, CSMV19, CSML19, CSMT19 or blank.
- f = Cable option: XL or blank
- g = mold color options /S679, /S771, /S1055, /S1057, /S1126, /S3001, /S3034, or blank
- h = /S1599 (lanyarded closure caps)

Listing - 2

Minifast Multibox Junctions

Model No.	Description
P-a-b- c defg [c defg]* [c defg]* - RSFekgtu	minifast ports, B- or C-size minifast home-run
	connector
P-a-b- c defg [c defg]* [c defg]* -n-pstu	minifast ports, integral home-run cable
P-a-b- c defg [c defg]* [c defg]* -n-ps- RSFekgtu	minifast ports, integral home-run cable w/mold-on B/C
	size minifast
P-a-bRKFe35-2148-p/p/v/v/v-RSFc1235tu	Minifast ports, integral drops and home-run cable

^{*}additional port number/type description groups when all ports are not identical

- a = Enclosure material: SS or blank.
- b = Total number of ports: 3, 4, 5, 6, 7 or 8.
- c = Number of ports of a given type if all ports are not identical: -1, -2, -3, -4. -5, -6, -7 or blank.
- d = Port connector type: RSF or RKF.
- e = Material: V or blank.
- f = Number of minifast port connector conductors: 2, 3, 4, 5, 6, 7, or 8.
- g = Wiring option: 0, 1, 2, 3, ... 9, 01, 02, 03, ... 99

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com

F 347 (Mar 16) Page 3 of 13



Member of the FM Global Group

US Certificate Of Conformity No: FM17US0047X

k = Home-run connector conductors 7, 8, 9, 10, 12 or 19

n = 3- or 4-digit cable number

p = Cable length in meters

s = Cable option: XL or blank

t = mold color options, /S679, /S771, /S1055, /S1057, /S1126, /S3001, /S3034 or blank

u = /S1599 (lanyarded closure caps)

v = Cable length in meters, or blank

A-Size Minifast Cords

Model No.	Description	
P-Rbgw cdpq-es-nM/v/y	Straight female molded cord	
P-Wbg cdpq-es-nM/v/y	Right angle female molded cord	
P-Rag cdpq-es-nM/v/y	Straight male molded cord	
P-Wag cdpq-es-nM/v/y	Right angle male molded cord	
P-RKgB cdAq-es-nM/v/y	Straight female molded cord, armored cable	
P-RSgB cdAq-es -nM/v/y	Straight male molded cord, armored cable	

- a = Cord gender: S or X b = Cord gender: K or Y
- c = Number of minifast pins/sockets: 2, 3, 4, 5 or 6.
- d = Minifast connection code: 0, 1, 2, 3, . . . 99.
- e = 3 or 4-digit ITC cable number.
- g = Housing material: M or V
- n = Cable or lead length
- p = Armored cable: A or blank
- q = H or blank.
- s = Cable option: XL or blank
- v = Option S1331 (lanyard connected lokfast), S1599 (lanyard connected closure cap), S849 (22AWG conductors), /S1658 (16AWG conductors), or blank
- w = Shielded construction, S or blank
- y = Mold color options: S679, S771, S1055, S1057, S1126, S3001, S3034 or blank

A-Size Minifast Cords with TC Cable

Model No.	Description
Woder No.	Description
P-TC-RKaw bc-ds-e/f/v/y	Straight female cord
P-TC-RSa bc-ds-e/f/v/y	Straight male cord
P-TC-WKa bc-ds-e/f/v/y	Right angle female cord
P-TC-WSa bc-ds-e/f/v/y	Right angle female cord

- a = Minifast housing material: M or V.
- b = Number of minifast pins/sockets: 2, 3, 4, 5, or 6.
- c = Minifast connection/color code: 0, 1, 2, 3, . . . 99.
- d = 3 or 4-digit ITC cable number.
- e = Cable or lead length in meters: Not safety relevant.
- f = Optional Conductor Size: CS12999 or blank.
- s = Cable option: XL or blank
- v = Option S1331 (lanyard connected lokfast), S1599 (lanyard connected closure cap) or blank
- w = Shielded construction, S or blank
- y = Mold color options: S679, S771, S1055, S1057, S1126, S3001, S3034 or blank

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA

T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com

F 347 (Mar 16) Page 4 of 13



Member of the FM Global Group

US Certificate Of Conformity No: FM17US0047X

A-Size Minifast Receptacles

Model No.	Description
P-RbFf cdt-n/k/x	Female receptacle, individual leads, device entry threads
P-RbFf cdt-n/k/x	Male receptacle, individual leads, device entry threads
P-RbFf cdt-es-n/k/x	Female receptacle, molded cable, device entry threads
P-RaFf cdt-es-n/k/x	Male receptacle, molded cable, device entry threads
P-RbFf cdt-n/x	Female receptacle, individual leads, front panel mount
P-RaFf cdt-n/x	Male receptacle, individual leads, front panel mount
P-RbFf cdt-es-n/x	Female receptacle, molded cable, front panel mount
P-RaFf cdt-es-n/x	Male receptacle, molded cable, front panel mount
P-RbFPf cdt-n	Female receptacle, individual leads, back panel mount
P-RaFPf cdt-n	Male receptacle, individual leads, back panel mount
P-RbFf cdt-EX-n/m	Female receptacle, explosionproof feed-thru, NPT device entry threads
P-RaFf cdt-EX-n/m	Male receptacle, explosionproof feed-thru, NPT device entry threads

a = Cord gender: S or X b = Cord gender: K or Y

c = Number of minifast pins/sockets: 2, 3, 4, 5 or 6. d = minifast connection code: 0, 1, 2, 3, ... 99.

e = 3 or 4-digit ITC cable number.

f = housing material: V or blank. k = Receptacle thread: 14.5/NPT, 14.75/NPT, or M20 m= Receptacle thread: 14.5/NPT or 14.75/NPT

n = Cable or lead length s = Cable option: XL or blank t = Shield connection: D or blank x = DD panel cut-out: S3256 or blank.

A-Size Minifast Field-Wireable Connectors

· • · · · · · · · · · · · · · · · · · ·	
Model No.	Description
Ba41c1-0/k	Female straight connector
BSa41c1-0/k	Male straight connector
Ba42c1-0/k	Female right angle connector
BSa42c1-0/k	Male right angle connector

oprovals

a = Material: V or blank

c = Number of minifast pins/sockets: 2, 3, 4, 5 or 6.

k = Cable diameter or thread: 9, 13.5, 8-17mm, 14.5/NPT, 14.75/NPT, or M20

Minifast Lokfast Guards

Model No.	Description
Lock-Mini-FWv	Locking guard for minifast field wireable connectors
Lock-Miniv	Locking guard for straight A-size minifast molded connectors
Lock-Mini-Anglev	Locking guard for right angle A-size minifast molded connectors
Lock-Mini-Teev	Locking guard for A-size minifast molded Tees
Lock-Mini-Zv	Locking guard for A-size straight minifast connectors, alternate const.
Lock-Mini-SSTv	Locking guard for A-size straight minifast connectors, SST
Lock-Mini-B&Cv	Locking guard for B- & C-size minifast connectors
Lock-Mini-B&C-Anglev	Locking guard for right angle B- & C-size minifast molded connectors

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com

F 347 (Mar 16) Page 5 of 13



Member of the FM Global Group

US Certificate Of Conformity No: FM17US0047X

v = /W/SS (with lanyard) or blank

Minifast Feed-Thru Y-Fittings

Model No.	Description
P-2RKFf cdEX-nk	2 female receptacles
P-2RKFf cdBEX-nk	2 female receptacles, common shield
P-2RSFf cdEX-nk	2 male receptacles
P-2RSFf cdBEX-nk	2 male receptacles, common shield
P-RSFf RKFf cdEX-nk	1 male receptacle, 1 female receptacle
P-RSFf RKFf cdBEX-nk	1 male receptacle, 1 female receptacle, common shield

- c = Number of minifast pins/sockets: 2, 3, 4, 5 or 6.
- d = Minifast connection code: 0, 1, 2, 3, ... 99.
- f = Housing material: V or blank.
- k = Receptacle thread: 14.5/NPT, 14.75/NPT, or M20.
- n = Cable or lead length.

B- and C-size Minifast cords

Model No.	Description
P-RKbw efh-ds-k/v/y	Straight female molded cord
P-RSb efh-ds-k/v/y	Right angle female molded cord
P-WKb efh-ds-k/v/y	Straight male molded cord
P-WSb efh-ds-k/v/y	Right angle male molded cord

- b = Material Option: M or V.
- d = Cable Type: 3- or 4-digit ITC cable number.
- e = Number of Conductors: 7, 8, 9, 10, 12 or 19.
- f = Connection/Color Code: Not safety relevant.
- h = Plastic Material: H or blank.
- k = Cable or Lead Length in Meters: Not safety relevant.
- s = Cable option: XL or blank
- v = Option S1331 (lanyard connected lokfast), S1599 (lanyard connected closure cap) or blank
- w = Shielded construction: S or blank
- y = Mold color options: S679, S771, S1055, S1057, S1126, S3001, S3034 or blank

B- and C-size Minifast Receptacles

Model No.	Description
P-RSFa efgh-kmv	Female receptacle, individual leads, device entry threads
P-RKFb efgh-kmv	Male receptacle, individual leads, device entry threads

- a = Material Option: V or blank.
- b = Material Option: M or V.
- e = Number of Conductors: 7, 8, 9, 10, 12 or 19.
- f = Connection/Color Code: Not safety relevant.
- g = Drain Connection: D or blank.
- h = Plastic Material: H or blank.
- k = Cable or Lead Length in Meters: Not safety relevant.
- m= Thread Option: /14.5/NPT, /14.75/NPT, M20, or blank.
- v = /S849 (22 AWG conductors)

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com

F 347 (Mar 16) Page 6 of 13



Member of the FM Global Group

US Certificate Of Conformity No: FM17US0047X

B- and C-size Minifast Feed-Thru Receptacles

Model No.	Description
P-RSFa efgEX-k/14.75/NPT	Female receptacle, explosionproof feed-thru, NPT device entry threads
P-RKFa efgEX-k/14.75/NPT	Male receptacle, explosionproof feed-thru, NPT device entry threads

a = Material Option: V or blank.

e = Number of Conductors: 7, 8, 9, 10, or 12.

f = Connection/Color Code: Not safety relevant.

g = Drain Connection: D or blank.

k = Cable or Lead Length in Meters: Not safety relevant.



Listing - 3

Multifast & Eurofast Multibox Junctions

Model No.	Description
P-a-b- c defg [c defg]* [c defg]* - CSejgtu	Minifast ports, Multifast home-run connector
P-a-b- c defg [c defg]* [c defg]* -n-ps- CSejgtu	Minifast ports, integral home-run cable w/mold-on
	Multifast
P-a-VBMe b-cmh [cmh]* [cmh]* - CSejg	Eurofast ports, Multifast home-run connector
P-a-VBMe b-cmh [cmh]* [cmh]* - RSFekg	Eurofast ports, B- or C-size Minifast home-run connector
P-a-VBMe b-cmh [cmh]* [cmh]* - n-ps	Eurofast ports, integral home-run cable
P-a-VBMe b-cmh [cmh]* [cmh]* - n-sp- CSejg	Eurofast ports, integral home-run cable w/mold-on
	Multifast
P-a-VBMe b-cmh [cmh]* [cmh]* - n-ps- RSFekg	
	size Minifast

^{*}additional port number/type description groups when all ports are not identical

- a = Enclosure material: SS or blank.
- b = Total number of ports: 3, 4, 5, 6, 7 or 8.
- c = Number of ports of a given type if all ports are not identical: -1, -2, -3, -4. -5, -6, -7 or blank.
- d = Port connector type: RSF or RKF.
- e = Material: V or blank.
- f = Number of minifast port connector conductors: 2, 3, 4, 5, 6, 7, or 8.
- g = Wiring option: 0, 1, 2, 3, ... 9, 01, 02, 03, ... 99
- h = Wiring option: 0, .1, .2, .3,99
- i = Home-run connector conductors: 12 or 19
- k = Home-run connector conductors: 7, 8, 9, 10, 12 or 19
- m= Number of eurofast port connector conductors: 4 or 5
- n = 3- or 4-digit cable number
- p = Cable length in meters
- s = Cable option: XL or blank
- t = mold color options: /S679, /S771, /S1055, /S1057, /S1126, /S3001, /S3034 or blank
- u = /S1599 (lanyarded closure caps)

Eurofast Cords

Model No.	Description
P-RKGf abT-es-n/v/y	Straight female G-body molded cord
P-RKEf abT-es-n/v/y	Straight female E-body molded cord

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com

F 347 (Mar 16) Page 7 of 13



Member of the FM Global Group

US Certificate Of Conformity No: FM17US0047X

P-WKEf abT-es-n/v/y	Right angle female molded cord	
P-RSGf abT-es-n/v/y	Straight male G-body molded cord	
P-RSEf abT-es-n/v/y	Straight male E-body molded cord	
P-WSEf abT-es-n/v/y	Right angle male molded cord	
P-RKAf abA-es-n/v/y	Straight female A-body molded cord	
P-RSAf-abA-es-n/v/y	Straight male A-body molded cord	

- a = Number of eurofast pins/sockets: 4, 5, or 8.
- b = Eurofast connection code: .1, .2, .3,99 or blank.
- e = 3 or 4-digit ITC cable number.
- f = Housing material: V or blank.
- n = Cable or lead length.
- s = Cable option: XL or blank
- v = Option S1331 (lanyard connected lokfast), S1599 (lanyard connected closure cap), S849 (22AWG conductors), /S613 (18AWG conductors), or blank
- y = mold color options: S679, S771, S1055, S1057, S1126, S3001, S3034 or blank

Eurofast Receptacles

Model No.	Description
P-FKf ab-nv	Female receptacle, individual leads, front panel mount
P-FSf ab-nv	Male receptacle, individual leads, front panel mount
P-FKf ab-n/kv	Female receptacle, individual leads, device entry threads
P-FSf ab-n/kv	Male receptacle, individual leads, device entry threads
P-FKf ab-es-n/kv	Female receptacle, molded cable, device entry threads
P-FSf ab-es-n/kv	Male receptacle, molded cable, device entry threads
P-FKPf ab-nv	Female receptacle, individual leads, back panel mount
P-FKPf ab-es-nv	Female receptacle, individual leads, back panel mount

- a = Number of eurofast pins/sockets: 4, 5, or 8.
- b = Eurofast connection code: .1, .2, .3,99 or blank.
- e = 3 or 4-digit ITC cable number.
- f = Housing material: V or blank.
- k = Receptacle thread: 14.5/NPT, 14.75/NPT, or M20.
- n = Cable or lead length.
- s = Cable option: XL or blank
- v = /S849 (22AWG conductors)

Eurofast Field-Wireable Connectors

Model No.	Description
Ba8141-0s	4-contact female straight connector
Ba8241-0s	4-contact female right angle connector
Ba8151-0s	5-contact female straight connector
Ba8251-0s	5-contact female right angle connector
BSa8141-0s	4-contact male straight connector
BSa8241-0s	4-contact male right angle connector
BSa8151-0s	5-contact male straight connector
BSa8251-0s	5-contact male right angle connector

a = Material: V or blank

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com

F 347 (Mar 16) Page 8 of 13



Member of the FM Global Group

US Certificate Of Conformity No: FM17US0047X

s = /0, /PG9, /8-11mm or blank

Eurofast Splitter

Model No.	Description
P-VB2-RSEf abT-es-n/2RKEf abT-es-n/t	Straight male to two straight female E-body molded cords
P-VB2-RKEf abT-es-n /2RSEf abT-es-n/t	Straight female to two straight male E-body molded cords

- a = Number of eurofast pins/sockets: 4, 5, or 8.
- b = Eurofast connection code: .1, .2, .3,99 or blank.
- e = 3 or 4-digit ITC cable number.
- f = Housing material: V or blank.
- n = Cable or lead length.
- s = Cable option, XL or blank
- t = mold color options, S679, S771, S1055, S1057, S1126, S3001, S3034 or blank

Multifast Cords

Model No.	Description
P-CKMh mp-es-n/y	Straight female molded cord with female coupling thread
P-CKWMh mp-es-n/y	Right angle female molded cord with female coupling thread
P-CSMh mp-es-n/y	Straight male molded cord with female coupling thread
P-CSWMh mp-es-n/y	Right angle male molded cord with female coupling thread
P-CSSMf mp-es-n/y	Straight male molded cord with male coupling thread
P-CXMf mp-es-n/y	Straight female molded cord with male coupling thread

- e = 3 or 4-digit ITC cable number.
- f = Material: V or blank.
- h = Multifast material/interlock: L, T, V or blank.
- m= Number of multifast conductors: 12 or 19.
- n = Cable or lead length.
- p = Armored cable: A or blank.
- s = Cable option: XL or blank
- y = mold color options, S679, S771, S1055, S1057, S1126, S3001, S3034 or blank

Multifast Receptacles

Model No.	Description
P-CKFLf mrp-es-n	Female receptacle, molded cable, front panel
P-CKFDf mrp-es-n	Female receptacle, molded cable, back panel
P-CSFLf mrp-es-n	Male receptacle, molded cable, front panel
P-CSFDf mrp-es-n	Male receptacle, molded cable, back panel
P-CKFLf mr-nu	Female receptacle, individual leads, front panel
P-CKFDf mr-nu	Female receptacle, individual leads, back panel
P-CSFLf mr-nu	Male receptacle, individual leads, front panel
P-CSFDf mr-nu	Male receptacle, individual leads, back panel

- e = 3 or 4-digit ITC cable number.
- f = Housing material: V or blank.
- m= Number of multifast conductors: 12 or 19.
- n = Cable or lead length. p = Armored cable: A or blank.

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA

T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com

F 347 (Mar 16) Page 9 of 13



Member of the FM Global Group

US Certificate Of Conformity No: FM17US0047X

r = Connection code: 1, 2, 3, ..., 9, 01, 02, 03, ..., 99.

s = Cable option, XL or blank

u = Option S613 (18AWG conductors) or blank

Minifast Tees

 ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Model No.	Description
P-RSg-RSg-RKg c0-wv	2 male minifast with 1 female minifast connector, same connection
P-RSg c0-RSg c0-RKg c0-wv	2 male minifast, 1 female minifast, dissimilar connection
P-RSg-2RKg c0-wv	1 male minifast, 2 female minifast connectors, same connection
P-RSg c0-2RKg c0-wv	1 male minifast, 2 female minifast connectors, dissimilar connection
P-RSg-RKg-RSg c0-wv	2 male minifast with 1 female minifast connector, same connection
P-RSg c0-RKg c0-RSg c0-wv	2 male minifast, 1 female minifast, dissimilar connection
P-*-e-n-RSg c0-*-es-nw	1 male minifast drop leg, 2 molded cord street legs
P-*-e-n-RKg c0-*-es-nw	1 female minifast drop leg, 2 molded cord street legs
P-RSg c0-*-es-n-RKg c0w	1 male minifast and 1 female minifast street legs, 1 molded cord drop leg
P-RSg c0-*-es-n-RSg c0w	2 male minifast street legs, 1 molded cord drop leg
P-RKg c0-*-es-n-RKg c0w	2 female minifast street legs, 1 molded cord drop leg

*molded cords may be any of the following:

Model Code	Description
RSg cd	Male straight minifast
RKg cd	Female straight minifast
WSg cd	Male right angle minifast
WKg cd	Female right angle minifast
RSGf ab	Male straight eurofast
RKGf ab	Female straight eurofast



a = Number of eurofast pins/sockets: 4 or 5.

b = Eurofast connection code: .1, .2, .3,99 or blank.

c = Number of minifast pins/sockets: 2, 3, 4, 5 or 6.

d = Minifast connection code: 0, 1, 2, 3, . . . 99.

e = 3 or 4-digit ITC cable number.

f = Housing material: V or blank.

g = Housing material: M or V.

n = Cable length in meters

s = Cable option: XL or blank

v = /KF, /KM or blank.

w = mold color options, /S679, /S771, /S1055, /S1057, /S1126, /S3001, /S3034 or blank

Lokfast Guards

Model No.	Description
Lock-Euro-FWa	Locking guard for eurofast field wireable connectors
Lock-Euro-Aa	Locking guard for A-body eurofast molded connectors
Lock-Euro-Ca	Locking guard for E-body eurofast molded connectors
Lock-Euro-Ga	Locking guard for G-body eurofast molded connectors

a = /W/SS (with lanyard) or blank

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com

F 347 (Mar 16) Page 10 of 13



Member of the FM Global Group

US Certificate Of Conformity No: FM17US0047X

V*fast Valve/Actuator Cords

Model No.	Description
P- TAa b-ces-fM/u/v/z	DIN 43650 Type A cord, ground side cable exit
P- TBa b-ces-fM/u/v/z	DIN 43650 Type B cord, ground side cable exit
P- Tla b-ces-fM/u/v/z	DIN 43650 Type I cord, ground side cable exit
P- TC8a b-des-fM/u/v/z	DIN 43650 Type C8 cord, ground side cable exit
P- TC9a b-des-fM/u/v/z	DIN 43650 Type C9 cord, ground side cable exit
P- VAa b-ces-fM/u/v/z	DIN 43650 Type A cord, non-ground side cable exit
P- VBa b-ces-fM/u/v/z	DIN 43650 Type B cord, non-ground side cable exit
P- VIa b-ces-fM/u/v/z	DIN 43650 Type I cord, non-ground side cable exit
P- VC8a b-des-fM/u/v/z	DIN 43650 Type C8 cord, non-ground side cable exit
P- VC9a b-des-fM/u/v/z	DIN 43650 Type C9 cord, non-ground side cable exit
P- HAa b-ces-fM/u/v/z	DIN 43650 Type A cord, top cable exit

- a = Body color: G, S or Y.
- b = Pin-out: 2, 21, 22, or 3.
- c = Wiring Code: A, B, C, D, E, F, or K.
- d = Wiring Code: A, L, M, N, P, R.
- e = 3- or 4-digit ITC or PLTC cable number.
- f = Cable length in meters.
- s = Cable option: XL or blank
- u = Option: S1830 (gasket kit) or blank
- v = Option S1331 (lanyard connected lokfast), S1599 (lanyard connected closure cap) or blank

z = SST screw: S996, or blank

Conduit Body Adapters

Model No.	Description
CA-1/FKc ab t	1 female Eurofast connector
CA-2/FKc ab t	2 identical female Eurofast connectors
CA-1/FSc ab t	1 male Eurofast connector
CA-2/FSc ab t	2 identical male Eurofast connectors
CA-FKc ab/FKc ab t	2 different female Eurofast connectors
CA-FKc ab/FSc ab t	1 female and 1 male Eurofast connectors
CA-FSc ab/FSc ab t	2 different male Eurofast connectors
CA-1/RhFc de t	1 female Minifast connector
CA-2/RhFc de t	2 identical female Minifast connectors
CA-1/RgFc de t	1 male Minifast connector
CA-2/RgFc de t	2 identical male Minifast connectors
CA-RhFc de/RhFc de t	2 different female Minifast connectors
CA-RgFc de/RgFc de t	1 female and 1male Minifast connectors
CA-RgFc de/RgFc de t	2 different male Minifast connectors
CA-RhFc de/FKc ab t	1 female Minifast and 1 female Eurofast connectors
CA-RhFc de/FSc ab t	1 male Minifast and 1 male Eurofast connectors
CA-RgFc de/FKc ab t	1 male Minifast and 1 female Eurofast connectors
CA-RhFc de/FSc ab t	1 female Minifast and 1 male Eurofast connectors
CA-1/CKc m t	1 female Multifast connector
CA-1/CSc m t	1 male Multifast connector

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com <a href="mai

F 347 (Mar 16) Page 11 of 13



Member of the FM Global Group

US Certificate Of Conformity No: FM17US0047X

- a = Number of eurofast pins/sockets: 4 or 5.
- b = Eurofast connection code: .1, .2, .3,99 or blank.
- c = Housing material: V or blank.
- d = Number of minifast pins/sockets: 2, 3, 4, 5 or 6.
- e = Minifast connection code: 0, 1, 2, 3, ... 99.
- g = Cord gender: S or X. h = Cord gender: K or Y.
- m= Number of multifast conductors: 12 or 19.
- t = /S651 (parallel wiring), /S3077 (wedge nut adaptor), or blank.

Listing - 4

Minifast MC-HL or TC-ER-HL Cordsets

miniact mo TiE of To Elt TiE octacoto		
Model No.	Description	
P-RSgB RKgB cdEX-e-nM/y	Male-female	
P-RSgB cdEX-e-nM/y	Male	
P-RKgB cdEX-e-nM/y	Female	

- c = Number of Minifast pins/sockets: 2, 3, 4, 5, or 6.
- d = Minifast connection code: 0, 1, 2, 3, . . . 99.
- e = 3 or 4-digit MC-HL or TC-ER-HL cable number.
- g = Housing material: M or V.
- n = Cable or lead length.
- y = Mold color options, S679, S771, S1055, S1057, S1126, S3001, S3034, or blank.

Listing - 5

MC-HL or TC-ER-HL Extensions

Model No.	Description
P-EXGf 1c-e-n/n/14.5/NPT/x	MC-HL extension with one NPT fitting
P-EXGf 2c-e-n/n/14.5/NPT/y	MC-HL extension with two NPT fittings

- c = Connection code: A1, A2, A3, ...Z9.
- e = 3 or 4-digit MC-HL or TC-ER-HL cable number.
- f = Housing material: V or blank.
- n = Cable or lead length.
- x = UNION or blank.
- y = UNION, 1UNION, or blank.

Minifast Feed-Thru Receptacles with MC-HL or TC-ER-HL Extensions

Model No.	Description
P-RSFf adEXG-e-n/n/14.5/NPT/x	Male conductor
P-RSym adEXG-e-n/n/14.5/NPT/x	Molded Minifast connector with male conductor

- a = Number of conductors: 2-10, 12.
- d = Minifast connection code: 0, 1, 2, 3, ... 99.
- e = 3 or 4-digit MC-HL or TC-ER-HL cable number.
- f = Housing material: V or blank.

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com

F 347 (Mar 16) Page 12 of 13



Member of the FM Global Group

US Certificate Of Conformity No: FM17US0047X

m= Minifast size: B or blank. n = Cable or lead length.

x = UNION or blank.

y = Housing material: V or M.

13. Specific Conditions of Use:

Intrinsically Safe Junction Bricks

- 1. Some of the enclosures are constructed from plastic. To prevent the risk of electrostatic sparking, the plastic surface should only be cleaned with a damp cloth.
- 2. Some of the enclosures contain aluminum. Aluminum is considered to constitute a potential risk of ignition by impact or friction. Care must be taken into account during installation and use to prevent impact or friction.

Conduit Body Adapters

1. Install in indoor hazardous locations only.

14. Test and Assessment Procedure and Conditions:

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

15. Schedule Drawings

A copy of the technical documentation has been kept by FM Approvals.

16. Certificate History

Details of the supplements to this certificate are described below:

Date	Description
9th January 2004	Original Issue.
25 th April 2017	Supplement 12: Report Reference: – 3057587 dated 25 th April 2017. Description of the Change: Updated to new format. Added new cords. Added Zone 2 equivalency to all models. Corrected listing errors.
18 th June 2017	Supplement 13: Report Reference: – RR209838 dated 18 th June 2017. Description of the Change: Corrected error on A-Size Minifast Receptacles listing.
6 th December 2018	Supplement 14: Report Reference: – PR450368 dated 6th December 2018. Description of the Change: Addition of Eurofast splitter and Minifast Feed-Thru Receptacle with MC-HL Extension.
20 th April 2020	Supplement 15: Report Reference: – PR453899 dated 20 th April 2020. Description of the Change: Re-examination of Nonincendive approval. Addition of Class II, Division 2, Groups E, F, & G. Major restructuring of the listing for clarity.

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com

F 347 (Mar 16) Page 13 of 13