

FTRV 8-FE /BKYE - Potential distributors

3270204

<https://www.phoenixcontact.com/sg/products/3270204>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Potential distributors, without actuating push button, nom. voltage: 250 V, nominal current: 17.5 A, connection method: Push-in connection, 1st, 2nd, 3rd and 4th level, Rated cross section: 1.5 mm², cross section: 0.14 mm² - 2.5 mm², mounting: NS 35/7,5, NS 35/15, color: gray, color of connection elements: black, yellow

Your advantages

- Tool-free wiring in a confined space thanks to compact size
- Individual color assignment of cable and terminal point to ensure error-free, safe operation
- High contact quality thanks to push-in technology as a replacement for Wire-Wrap®, TERMI-POINT®, etc.
- Potential distributor in black-yellow version for marking the functional ground
- The 2.3 mm test pick-off enables testing between the conductors with commercially available test probes

Commercial data

Item number	3270204
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	*****
Product key	BE6211
Catalog page	Page 51 (C-1-2019)
GTIN	4055626046747
Weight per piece (including packing)	32.83 g
Weight per piece (excluding packing)	32.83 g
Customs tariff number	85369010
Country of origin	PL

3270204

<https://www.phoenixcontact.com/sg/products/3270204>

Technical data

Product properties

Product type	Potential distributor
Number of positions	2
Number of connections	32
Number of rows	4
Potentials	1

Data management status

Article revision	02
------------------	----

Insulation characteristics

Overvoltage category	III
----------------------	-----

Electrical properties

Rated surge voltage	4 kV
Maximum power dissipation for nominal condition	0.56 W

Connection data

Number of connections per level	4
Nominal cross section	1.5 mm ²

1st, 2nd, 3rd and 4th level

Stripping length	8 mm ... 10 mm
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section rigid	0.14 mm ² ... 2.5 mm ²
Cross section AWG	26 ... 14 (converted acc. to IEC)
Conductor cross section flexible	0.14 mm ² ... 1.5 mm ²
Conductor cross section, flexible [AWG]	26 ... 16 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm ² ... 1.5 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.14 mm ² ... 1.5 mm ²
Nominal current	17.5 A
Maximum load current	20 A (in case of a 2.5 mm ² conductor cross section, the maximum load current must not be exceeded by the total current of all connected conductors.)
Nominal voltage	250 V
Nominal cross section	1.5 mm ²

1st, 2nd, 3rd and 4th level Connection cross sections directly pluggable

Conductor cross section rigid	0.34 mm ² ... 2.5 mm ²
Conductor cross section, rigid [AWG]	20 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.34 mm ² ... 1.5 mm ²
Flexible conductor cross section (ferrule with plastic sleeve)	0.34 mm ² ... 1.5 mm ²

Dimensions

FTRV 8-FE /BKYE - Potential distributors



3270204

<https://www.phoenixcontact.com/sg/products/3270204>

Width	8.3 mm
-------	--------

Material specifications

Color	gray (RAL 7042)
Color of connection elements	black (4x top) yellow (4x bottom)
Flammability rating according to UL 94	V0
Insulating material group	I
Insulating material	PA
Static insulating material application in cold	-60 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	125 °C
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R26	HL 1 - HL 3
Calorimetric heat release NFPA 130 (ASTM E 1354)	27,5 MJ/kg
Surface flammability NFPA 130 (ASTM E 162)	passed
Specific optical density of smoke NFPA 130 (ASTM E 662)	passed
Smoke gas toxicity NFPA 130 (SMP 800C)	passed

Electrical tests

Surge voltage test

Test voltage setpoint	4.8 kV
Result	Test passed

Temperature-rise test

Requirement temperature-rise test	Increase in temperature \leq 45 K
Result	Test passed
Short-time withstand current 1.5 mm ²	0.18 kA
Short-time withstand current 2.5 mm ²	0.3 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	1.5 kV
Result	Test passed

Mechanical properties

Mechanical data

Open side panel	Yes
-----------------	-----

Mechanical tests

Mechanical strength

FTRV 8-FE /BKYE - Potential distributors



3270204

<https://www.phoenixcontact.com/sg/products/3270204>

Result	Test passed
--------	-------------

Attachment on the carrier

DIN rail/fixing support	NS 35
Test force setpoint	1 N
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 rpm
Revolutions	135
Conductor cross section/weight	0.14 mm ² / 0.2 kg
	1.5 mm ² / 0.4 kg
	2.5 mm ² / 0.7 kg
Result	Test passed

Environmental and real-life conditions

Aging

Temperature cycles	192
Result	Test passed

Needle-flame test

Time of exposure	30 s
Result	Test passed

Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2008-03
Spectrum	Service life test category 2, bogie-mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	6.12 (m/s ²) ² /Hz
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

Shocks

Specification	DIN EN 50155 (VDE 0115-200):2008-03
Pulse shape	Half-sine
Acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Result	Test passed

Ambient conditions

Ambient temperature (operation)	-60 °C ... 105 °C (max. short-term operating temperature RTI Elec.)
---------------------------------	---

FTRV 8-FE /BKYE - Potential distributors



3270204

<https://www.phoenixcontact.com/sg/products/3270204>

Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
Permissible humidity (storage/transport)	30 % ... 70 %

Standards and regulations

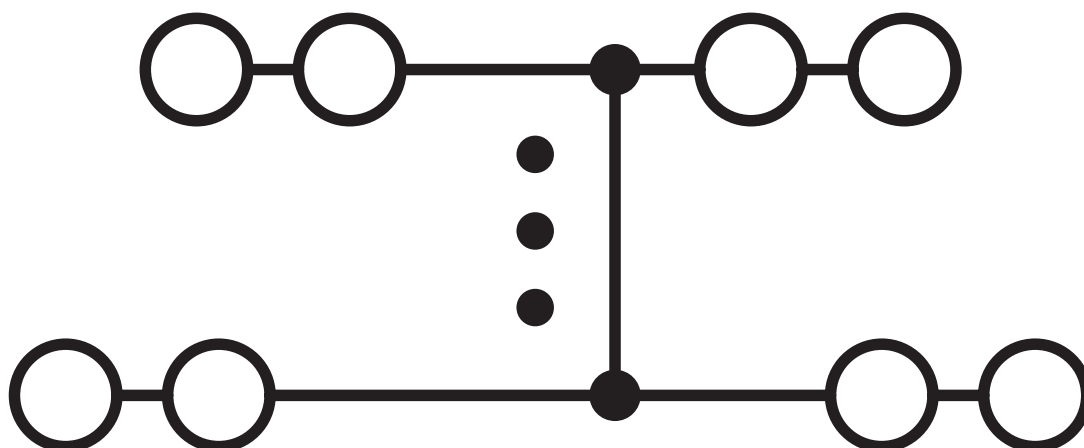
Connection in acc. with standard	IEC 60947-7-1
----------------------------------	---------------

Mounting

Mounting type	NS 35/7,5
	NS 35/15

Drawings

Circuit diagram



FTRV 8-FE /BKYE - Potential distributors



3270204

<https://www.phoenixcontact.com/sg/products/3270204>

Classifications

ECLASS

ECLASS-11.0

27141120

ETIM

ETIM 8.0

EC000897

UNSPSC

UNSPSC 21.0

39121400

FTRV 8-FE /BKYE - Potential distributors



3270204

<https://www.phoenixcontact.com/sg/products/3270204>

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
---	--------------------

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
-------------------------------------	----------------------------

Phoenix Contact 2024 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT SEA Pte. Ltd.

105 Eunos Avenue 3, #04-00

Singapore 409836

+65 6228 4900

marketing@phoenixcontact.com.sg