Product references - DF type

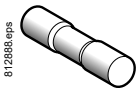
DF101

DF103

DF2CA●●● (5)
DF2CN●● (5)

DF141

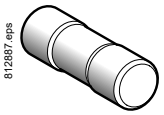
DF143NC



DF2EA●●● (5)
DF2EN●● (5)

DF221

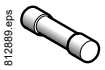
DF223NC



DF2FA●● (5)
DF2FN●● (5)

DF101NV

DF103V



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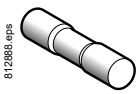
DF2CN●● (5)

DF141NV

DF143VC



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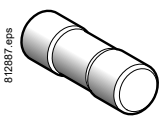
DF2EN●● (5)

DF221NV

DF223VC



DF2FA●● (5)
DF2FN●● (5)

For protection of control circuits or transformers

Fuse carriers (1)

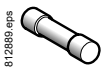
Conventional thermal current (Ith)	Size of cartridge fuse or link	Composition	Sold in lots of	Unit reference
A	mm			
25	8.5 x 32	1 P	12	**DF81**
		N	12	**DF10N**
		2 P	6	**DF82**
		3 P	4	**DF83**
		3 P + N (2)	3	**DF83N**
32	10 x 38	1 P	12	**DF101**
		N	12	**DF10N**
		1 P + N (2)	6	**DF101N**
		2 P	6	**DF102**
		3 P	4	**DF103**
		3 P + N (2)	3	**DF103N**
50	14 x 51	1 P	6	**DF141**
		N	6	**DF14N**
		2 P	3	**DF142**
		3 P	2	**DF143C** (3)
		3 P + N (2)	1	**DF143NC** (3)
125	22 x 58	1 P	6	**DF221**
		N	6	**DF22N**
		2 P	3	**DF222**
		3 P	2	**DF223C** (3)
		3 P + N (2)	1	**DF223NC** (3)

Fuse carriers with "blown fuse" indicators (LED) (1) (4)

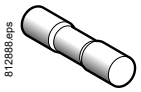
Conventional thermal current (Ith)	Size of cartridge fuse or link	Composition	Sold in lots of	Unit reference
A	mm			
25	8.5 x 32	2 P	6	**DF82V**
		3 P	4	**DF83V**
32	10 x 38	1 P	12	**DF101V**
		1 P + N (2)	6	**DF101NV**
		2 P	6	**DF102V**
		3 P	4	**DF103V**
		3 P + N (2)	3	**DF103NV**
50	14 x 51	1 P	6	**DF141V**
		3 P	2	**DF143VC** (3)
		3 P + N (2)	1	**DF143NVC** (3)
125	22 x 58	3 P	2	**DF223VC** (3)
		3 P + N (2)	1	**DF223NVC** (3)

(1) Each pole can be marked. A clip-in marker holder is provided for this purpose. DF8●●● and DF10●●● are pad lockable fuse carriers.
(2) N: neutral pole fitted with a locked tubular link as standard.
(3) A letter "C" in the reference indicates that the fuse carrier can be fitted with auxiliary early break, "blown fuse" signalling and "fuse present" signalling contacts.
(4) Operational voltage of the blown fuse indicator: 110 V...690 V.
(5) For optional compatible fuses selection by size and by type (aM or gG) please refer to the opposite page B4/5.

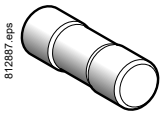
Product references - DF type



DF2CA●●●
DF2CN●●



DF2EA●●●
DF2EN●●



DF2FA●●
DF2FN●●

NFC Cartridge fuses - Type aM / gG - From 0.25 to 125 A

Fuse type	Maximum rated voltage	Rating	Sold in lots of	Fuses without striker	
				Unit reference	
	V ∼	A		aM	gG
Cylindrical 8.5 x 31.5	400	1	10	–	DF2BN0100
		2	10	DF2BA0200	DF2BN0200
		4	10	DF2BA0400	DF2BN0400
		6	10	DF2BA0600	DF2BN0600
		8	10	–	DF2BN0800
		10	10	–	DF2BN1000
		12	10	–	DF2BN1200
		16	10	–	DF2BN1600
		20	10	–	DF2BN2000
Cylindrical 10 x 38	500	0.50	10	DF2CA005	–
		1	10	DF2CA01	–
		2	10	DF2CA02	DF2CN02
		4	10	DF2CA04	DF2CN04
		6	10	DF2CA06	DF2CN06
		8	10	DF2CA08	DF2CN08
		10	10	DF2CA10	DF2CN10
		12	10	DF2CA12	DF2CN12
		16	10	DF2CA16	DF2CN16
		20	10	–	DF2CN20
	400	20	10	DF2CA20	–
		25	10	DF2CA25	DF2CN25
		32	10	DF2CA32	DF2CN32
Cylindrical 14 x 51	500	16	10	DF2EA16	–
		20	10	DF2EA20	–
		25	10	DF2EA25	DF2EN25
		32	10	DF2EA32	DF2EN32
		40	10	DF2EA40	DF2EN40
	400	50	10	DF2EA50	DF2EN50
Cylindrical 22 x 58	690	10	10	–	DF2FN10
		20	10	–	DF2FN20
		25	10	–	DF2FN25
		32	10	–	DF2FN32
		40	10	DF2FA40	DF2FN40
		50	10	DF2FA50	DF2FN50
	500	63	10	DF2FA63	DF2FN63
		80	10	DF2FA80	DF2FN80
		100	10	DF2FA100	DF2FN100
	400	125	10	DF2FA125	–

For protection of equipment with current peaks
For protection of circuits without significant current peaks

Technical Data for Designers

Contents

Characteristics - DF type

Environment characteristics

Fuse carrier type			DF8	DF10	DF14	DF22
Conforming to standards			IEC/EN 60947-3, IEC/HD 60269-2	IEC/EN 60947-3 (1), IEC/HD 60269-2, R22HL2, UL 4248-1 (2), CSA C22.2 No 4248-1 (2)	IEC/EN 60947-3, UL 4248-1, CSA C22.2 No 4248-1	
Product certification			IEC, EAC, CCC, UKCA	IEC, UL, CSA, EAC, DNV-GL, CCC, UKCA	IEC, UL, CSA, EAC, UKCA	
Degree of protection	Conforming to IEC 60529		IP 20			
Ambient air temperature	Storage	**°C**	-40…+80			
	For operation, with derating (1)	**°C**	-20…+60			
Operating positions			± 23° in relation to normal mounting plane			
Flame resistance	Conforming to IEC 60695-2-1	**°C**	960			

Pole characteristics

Fuse size		**mm**	8.5 x 32		10 x 38		14 x 51	22 x 58	
Maximum power dissipated by fuse		**W**	2.50		3.00		5.00	9.50	
Rated insulation voltage (Ui) with tubular links, a.c. or D.C. supply		**V**	500		690		690	690	
Rated impulse withstand voltage (Uimp)		**kV**	6		6		8	8	
Conventional thermal current (Ith) for ambient air temperature ≤ 20 °C (3)									
	With tubular links	**A**	25		32		50	125	
	With aM cartridge fuses	**A**	25		32		50	125	
	With gG cartridge fuses	**A**	25		32		50	100	
Rated conditional short-circuit current Conforming to IEC 60947-3									
	400 V	**kA**	20		120		120	120	
	500 V	**kA**	–		120		120	120	
	690 V	**kA**	–		–		80	80	
Peak withstand current (dynamic stress) Conforming to IEC 60269-1									
	With tubular links	**kA**	11		15		15	19	
Cabling (number of conductors x c.s.a.)			**Min.**	**Max.**	**Min.**	**Max.**	**Min.**	**Max.**	**Min.**	**Max.**
	Solid cable	**mm²**	1 x 1	1 x 16 2 x 6	1 x 1	1 x 16 2 x 6	1 x 2.5	1 x 25 2 x 10	1 x 2.5	1 x 35 2 x 25
	Flexible cable without cable end	**mm²**	1 x 1	1 x 10 2 x 6	1 x 1	1 x 10 2 x 6	1 x 2.5	1 x 25 2 x 10	1 x 2.5	1 x 35 2 x 16
	Flexible cable with cable end	**mm²**	1 x 1	1 x 10 2 x 6	1 x 1	1 x 10 2 x 6	1 x 2.5	1 x 25 2 x 10	1 x 2.5	1 x 35 2 x 16
Tightening torque		**Nm**	2.2				3.5		4	

Characteristics of early break and signalling contacts DF14 AM and DF22 AM

Rated insulation voltage (Ui) a.c. supply		**V**	250			
Conventional thermal current (Ith) for ambient air temperature ≤ 20 °C (1)		**A**	5			
Rated operational current			**24 V**	**48 V**	**127 V**	**240 V**
	Category AC-15	**A**	4	4	3	2.5
	Category DC-13	**A**	3	1	0.2	0.1
Definition of rated characteristics	Conforming to IEC 60947-5-1		B300			
Low load operating characteristics	Minimum voltage	**V**	10			
	Minimum current	**mA**	30			
Cabling			Faston connectors			

(1) DF101PV excluded.
(2) DF101PV add UL/CSA 4248-19.
(3) For use in an installation with ambient temperature > 20 °C, apply a derating coefficient:

Maximum temperature	**20 °C**	**30 °C**	**40 °C**	**50 °C**	**60 °C**
Max. relative humidity	95 %	90 %	80 %	50 %	50 %
Current derating coefficient	1	0.95	0.9	0.8	0.7

Number of poles (each side)	**1 to 3**	**4 to 6**	**≥7**
Current derating coefficient	1	0.95	0.9

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References: pages B4/4 and B4/6
Dimensions: page B4/11
Schemes: page B4/11

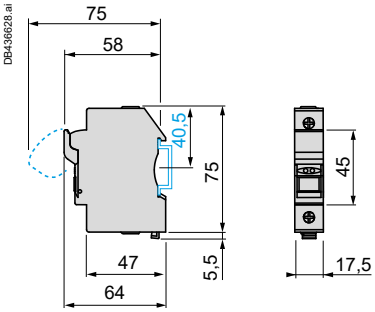
Dimensions, schemes - DF type

Dimensions

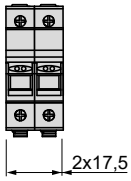
Modular fuse carriers 25 A and 32 A

Mounting on 35 mm ⊔ rail

DF81 and DF81V
DF101 and DF101V
DF10N



DF81N and DF81NV
DF82 and DF82V
DF101N and DF101NV
DF102 and DF102V



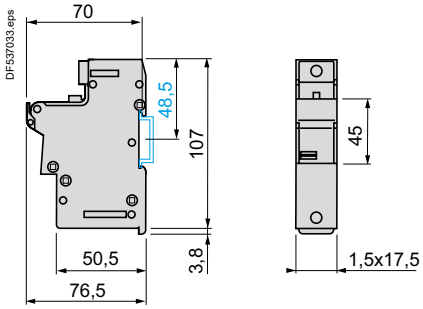
DF83 and DF83V
DF103 and DF103V

DF83N and DF83NV
DF103N and DF103NV

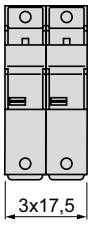
Modular fuse carriers 50 A

Mounting on 35 mm ⊔ rail

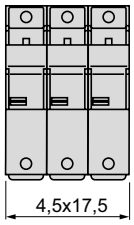
DF141 and DF141V
DF14N



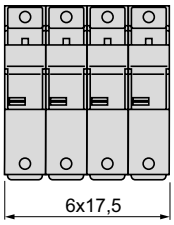
DF141N and DF141NV
DF142 and DF142V



DF143C and DF143VC



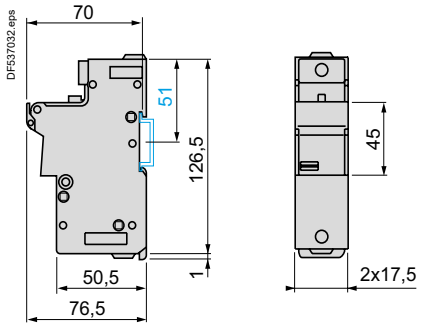
DF143NC and DF143NVC



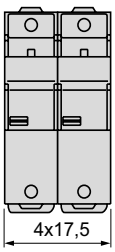
Modular fuse carriers 125 A

Mounting on 35 mm ⊔ rail

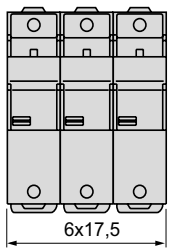
DF221 and DF221V
DF22N



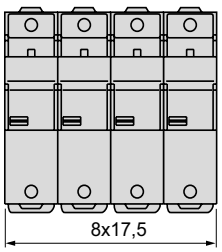
DF221N and DF221NV
DF222 and DF222V



DF223C and DF223VC



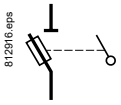
DF223NC and DF223NVC



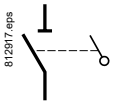
Schemes

Modular fuse carriers

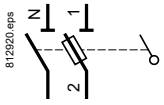
DF•1P



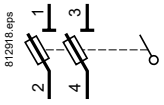
DF•N



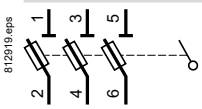
DF•1P + N



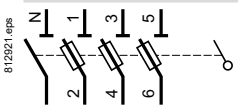
DF•2P



DF•3P



DF•3P + N



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