

Cable for Variable Frequency Drives (VFD's), RFOU-VFD 0,6/1(1,8/3)kV with flexible conductors class 5 and separate earth cores

Flame retardant cables

RFOU-VFD

0,6/1 (1,8/3)kV



**Power cable for variable frequency drives
Class 5 conductors
Halogen free and Mud resistant**

Maximum operating conductor temperature : 90°C

Operating voltage : 0,6/1(1,2)kV

Application

Special cable for Variable Frequency Drives / Azimuth motors up to 1kV.

Suitable for voltage peaks up to 3600V.

Armoured cable for fixed installations in ships and offshore units. Can be installed and operated both indoors and outdoors. Oil and MUD resistant to NEK606.

Standards applied

- | | |
|-------------------|-------------------|
| IEC 60092-353 | - Design |
| IEC 60228 class 5 | - Conductor |
| IEC 60092-360 | - Insulation |
| IEC 60092-360 | - Sheath |
| IEC 60332-1-2 | - Flame Retardant |
| IEC 60332-3-22 | - Flame Retardant |
| IEC 60754-1,2 | - Halogen Free |
| IEC 61034-1,2 | - Low Smoke |

CONSTRUCTION

	CODE LETTER	
Conductor		Tinned, annealed, flexible copper, IEC 60228 class 5.
Insulation	R	EP-rubber, IEC 60092-360 (EPR)
Lay up		3 insulated phase-conductors are laid up with 3 insulated earth conductors.
Bedding	F	Flame retardant halogen-free thermoset compound
Armour	O	Cu/PETP-tape Tinned copper wire braid. Shield coverage is 100% PETP-tape
Outer sheath	U	Flame retardant halogen-free thermoset compound, SHF2 (IEC 60092-360).
Marking		E.g; "meter" "DRAKA 01 RFOU – VFD 0,6/1(1,8/3)kV 3 × 95 + 3 x 16 mm² IEC 60332-3-22
Colour		Black or Yellow



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Core identification:

The three main power cores: Brown – Black – Grey
 All three Earth cores: Yellow/green

RANGE AND DIMENSIONS RFOU-VFD 0,6/1(1,8/3) kV

No. of cores and cond. area mm ²	Cond. diam. appr. mmØ	Insulation thickness mm	Thickness of bedding approx. mm	Diameter over bedding mmØ	Armour/ screen wire diameter mmØ	Thickness of outer sheath, nominal mm	Diameter overall mmØ	Weight of cable kg/km	Copper content Approx. (kg/km)
3x 10 + 3x 4	4,3 2,7	2,8 1,0	1,5	24,5 ± 1,0	0,30	1,6	29,0 ± 1,0	1470	525
3x 25 + 3x 6	7,2 3,3	2,2 1,0	1,6	28,5±1,0	0,30	1,8	33,5±1,5	2180	1045
3x 35 + 3x 6	8,45 3,3	2,2 1,0	1,6	31,5 ± 1,5	0,30	1,9	36,5 ± 1,5	2540	1320
3x 50 + 3x 10	10,65 4,3	2,4 1,0	1,6	36,0±1,5	0,30	2,0	41,5±2,0	3500	1860
3x 95 + 3x 16	14,3 5,9	2,4 1,0	1,6	45,0±2,0	0,40	2,3	51,0±2,5	5690	3400
3x 95 + 3x 25	14,3 7,2	2,4 1,2	1,6	45,5±2,0	0,4	2,3	52±2,0	6000	3650
3x 120 + 3x 25	16,6 7,2	2,4 1,2	1,8	50,0±2,5	0,40	2,5	57,0±2,5	7130	4380
3x 150 + 3x 16	18,1 5,9	2,4 1,0	1,8	53,5±2,5	0,40	2,6	60,5±3,0	8200	5105
3x 150 + 3x 25	18,1	2,4 1,0	1,8	53,5 ± 2,5	0,40	2,6	60,5 ± 3,0	8390	5345
3x 150 + 3x 35	18,1	2,4 1,2	1,8	53,5 ± 2,5	0,40	2,6	60,5 ± 3,0	8560	5590
3x 185 + 3x 16	19,9 5,9	2,4 1,0	1,8	57,5±2,5	0,40	2,7	65,0±3,0	9550	6060

Tba = to be agreed in case of an order

Ordering information

New Part number	Old Part number	Description	Sheath Colour	Stock item	EAN No. DNK	EL No.
		RFOU-VFD 1kV(3kV) 3x 10 mm ² + 3x 4 mm ²	YELLOW	-	-	-
	886833	RFOU-VFD 1kV(3kV) 3x 10 mm ² + 3x 4 mm ²	BLACK	-	7021528868333	-
	886829	RFOU-VFD 1kV(3kV) 3x 25 mm ² + 3x 6 mm ²	YELLOW	-	7021528868296	-
		RFOU-VFD 1kV(3kV) 3x 25 mm ² + 3x 6 mm ²	BLACK	-	-	-
		RFOU-VFD 1kV(3kV) 3x 35 mm ² + 3x 6 mm ²	BLACK	-	-	-
		RFOU-VFD 1kV(3kV) 3x 35 mm ² + 3x 6 mm ²	YELLOW	-	-	-
	886828	RFOU-VFD 1kV(3kV) 3x 50 mm ² + 3x 10 mm ²	YELLOW	-	7021528868589	-
20109486		RFOU-VFD 1kV(3kV) 3x 50 mm ² + 3x 10 mm ²	BLACK	-	7021528868319	-
	886360	RFOU-VFD 1kV(3kV) 3x 95 mm ² + 3x 16 mm ²	YELLOW	-	7021528863604	-
20109487		RFOU-VFD 1kV(3kV) 3x 95 mm ² + 3x 16 mm ²	BLACK	-	7021528868326	-
		RFOU-VFD 1kV(3kV) 3x 95 mm ² + 3x 25 mm ²	YELLOW	-	-	-
		RFOU-VFD 1kV(3kV) 3x 95 mm ² + 3x 25 mm ²	BLACK	-	-	-
	886756	RFOU-VFD 1kV(3kV) 3x 120 mm ² + 3x 25 mm ²	YELLOW	-	7021528867565	-
	887077	RFOU-VFD 1kV(3kV) 3x 120 mm ² + 3x 25 mm ²	BLACK	-	7021528870770	-
	886421	RFOU-VFD 1kV(3kV) 3x 150 mm ² + 3x 16 mm ²	YELLOW	-	7021528864212	-
		RFOU-VFD 1kV(3kV) 3x 150 mm ² + 3x 16 mm ²	BLACK	-	-	-

New Part number	Old Part number	Description	Sheath Colour	Stock item	EAN No. DNK	EL No.
		RFOU-VFD 1kV(3kV) 3x 150 mm ² + 3x 25 mm ²	YELLOW	-	-	-
	887078	RFOU-VFD 1kV(3kV) 3x 150 mm ² + 3x 25 mm ²	BLACK	-	7021528870787	-
	886793	RFOU-VFD 1kV(3kV) 3x 150 mm ² + 3x 35 mm ²	YELLOW	-	7021528867930	-
		RFOU-VFD 1kV(3kV) 3x 150 mm ² + 3x 35 mm ²	BLACK	-	-	-
	887207	RFOU-VFD 1kV(3kV) 3x 185 mm ² + 3x 16 mm ²	YELLOW	-	7021528872071	-
		RFOU-VFD 1kV(3kV) 3x 185 mm ² + 3x 16 mm ²	BLACK	-	-	-

Electrical values power cables

No. of cores and cond. area mm ²	Resistance at 20°C ohm/km	Resistance at 90°C ohm/km	Reactance at 50Hz Ohm/km	Current rating at 45°C Ampere	Short circuit rating 1 sec. Ampere
3x 10 + 3x 4	1,95 5,09	2,49 6,49	0,083	50	1400
3x 25 + 3x 6	0,795 3,39	1,014 4,323	0,089	89	3500
3x 35 + 3x 6	0,565 3,39	0,668 4,323	0,086	110	4900
3x 50 + 3x 10	0,393 1,95	0,501 2,486	0,081	137	7000
3x 95 + 3x 16	0,210 1,24	0,268 1,58	0,077	205	13300
3x 95 + 3x 25	0,210 0,795	0,268 1,014	0,077	205	13300
3x 120 + 3x 25	0,164 0,795	0,209 1,014	0,075	237	16800
3x 150 + 3x 16	0,132 1,24	0,1683 1,58	0,074	272	21000
3x 150 + 3x 25	0,132 0,795	0,1683 1,013	0,074	272	21000
3x 150 + 3x 35	0,132 0,565	0,1683 0,7204	0,074	272	21000
3x 185 + 3x 16	0,108 1,24	0,1683 1,58	0,073	311	25900

Ambient temperature correction factors

Ambient Temp °C	35	40	45	50	55	60	65	70	75	80
Rating factor	1.10	1.05	1.00	0.94	0.88	0.82	0.74	0.67	0.58	0.47

Installation recommendations

Minimum Bending Radius during Installation	Minimum Bending Radius Fixed Installed	Maximum Tensile Load During Installation	Minimum Installation Temperature
8 x D	6 x D	50 N /mm ²	-20°C



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