Cable for Variable Frequency Drives (VFD's), RFOU-VFD 0,6/1(1,8/3)kV with stranded conductors class 2 and tinned copper wire braid as earth

Flame retardant cables

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

EPR/EPR/TCWB/EVA

Halogen-free, Mud resistant

Maximum operating
Conductor temperature : 90°C
Operating voltage : 0,6/1kV (3 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 2	- Conductor
IEC 60092-351	- Insulation
IEC 60092-359	- Sheath
IEC 60332-1	- Flame Retardant
IEC 60332-3-22	- Flame Retardant
IEC 60754-1,2	- Halogen Free
IEC 61034-1,2	- Low Smoke

CONSTRUCTION

	CODE LETTER	
Conductor		Circular, tinned, stranded copper. IEC 60228 Class 2 (1)
Insulation	**R**	EP-rubber (2)
Bedding	**F**	Flame retardant and halogen-free thermoset compound. (3)
Armour	**O**	Cu/PETP-tape. (4) Tinned copper wire braid. (5) **Shield coverage is 100%** PETP-tape. (6)
Outer sheath	**U**	Flame retardant, halogen-free and mud resistant thermoset compound, SHF2.(7)
Marking		E.g; "meter" "year" DRAKA 01 RFOU-VFD 0,6/1kV (1,8/3) kV 3x 95/50 mm² IEC 60332-3-22
Colour		Yellow or Black

Core identification:

Three cores: Brown – Black - Grey

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

No. of cores and cond. area (mm²)	Cond. diam. appr. (mmØ)	Insulation thickness (mm)	Thickness of inner covering, mm	Diameter bedding (mmØ)	Diameter of armour /shield wire (mmØ)	Thickness outer sheath, mm	Diameter outer sheath (mmØ)	Weight of cable approx (kg/km)	Copper content Approx. (kg/km)
3x 2.5/10	2.0	2.2	1.1	16.5 ± 0.8	0.30	1.5	20.5 ± 1	690	202
3x 4/10	2.55	2.2	1.1	17.5 ± 0.8	0.30	1.5	21.5 ± 1	780	243
3x 6/10	3,15	2.2	1.2	19 ± 0.8	0.30	1.6	23.5 ± 1	940	314
3x 10/10	4,05	2.2	1.2	21 ± 1	0.30	1.6	25 ± 1	1130	422
3x 16/16	5,15	2,2	1.6	24 ± 1	0.30	1.7	29 ± 1	1560	638
3x 25/16	6,75	2.2	1.6	28 ± 1	0.30	1.8	33 ± 1.5	2090	935
3x 50/25	9,10	2.2	1.7	33 ± 1.5	0.40	2	38.5 ± 1.5	3110	1617
3x 70/35	10.85	2.2	1.6	36.5 ± 1.5	0.50	2.2	43 ± 2	4160	2385
3x 95/50	12,60	2,4	2,0	42 ± 2,0	0.60	2,3	49 ± 2	5420	3166
3x 120/60	14.20	2.4	2.0	45.5 ± 2	0.60	2.5	53 ± 2.5	6590	3975
3x 150/70	15.90	2.4	1.4	48 ± 2,0	2 layer 0.40	2,7	56.5 ± 2,5	7800	5015
3x 185/95	17.7	2.4	2.0	53 ± 2.5	2 layer 0.50	2.8	63 ± 3	9660	6288
3x 240/120	20.15	2.4	1.8	58.5 ± 2.5	2 layer 0.60	3	68.5 ± 3	11970	8050

Ordering information

New Part number	Old Part number	Description	Sheath Colour	Stock item	EAN No. DNK	EL No.
		RFOU-VFD 1kV(3kV) 3x 2.5/10 mm²	BLACK	-	-	-
		RFOU-VFD 1kV(3kV) 3x 4/10 mm²	BLACK	-	-	-
		RFOU-VFD 1kV(3kV) 3x 6/10 mm²	BLACK	-	-	-
		RFOU-VFD 1kV(3kV) 3x 10/10 mm²	BLACK	-	-	-
	886852	RFOU-VFD 1kV(3kV) 3x 16/16 mm²	YELLOW	-	7021528868524	-
	886854	RFOU-VFD 1kV(3kV) 3x 16/16 mm²	BLACK	-	7021528868548	-
	886972	RFOU-VFD 1kV(3kV) 3x 25/16 mm²	YELLOW	-	7021528869729	-
	886973	RFOU-VFD 1kV(3kV) 3x 50/25 mm²	YELLOW	-	7021528869736	-
		RFOU-VFD 1kV(3kV) 3x 70/35 mm²	BLACK	-	-	-
20114764		RFOU-VFD 1kV(3kV) 3x 95/50 mm²	BLACK	-	7021528868890	-
	886971	RFOU-VFD 1kV(3kV) 3x 120/60 mm²	YELLOW	-	7021528869712	-
		RFOU-VFD 1kV(3kV) 3x 150/70 mm²	BLACK	-	-	-
	886970	RFOU-VFD 1kV(3kV) 3x 185/95 mm²	YELLOW	-	7021528869705	-
20109484		RFOU-VFD 1kV(3kV) 3x 240/120 mm²	BLACK	-	-	-

Electrical characteristics

No. of cores and cond. area (mm²)	Resistance at 20°C (ohm/km)	Resistance at 90°C (ohm/km)	Reactance at 50Hz (ohm/km)	Current rating at 45°C (ampere)	Short curcuit rating, 1 sec (ampere)
3x 2.5/10	7.56	9.64	0.131	21	350
3x 4/10	4.7	5.99	0.122	28	560
3x 6/10	3.11	3.97	0.114	36	840
3x 10/10	1.84	2.35	0.105	50	1400
3x 16/16	1,16	1.48	0.098	67	2240
3x 25/16	0.734	0.936	0.091	89	3500
3x 50/25	0.391	0.499	0.084	137	7000
3x 70/35	0.270	0.344	0.081	169	9800
3x 95/50	0,195	0.249	0.080	205	13300
3x 120/60	0.154	0.196	0.078	237	16800
3x 150/70	0.126	0.161	0.076	273	21000
3x 185/95	0.100	0.128	0.074	311	25900
3x 240/120	0.0762	0.0972	0.073	366	33600

Correction factors for different ambient temperatures:

Ambient temp. °C	25	30	35	40	45	50	55	60	65	70	75
Rating factors	1,22	1,17	1,12	1,06	1,00	0,94	0,87	0,79	0,71	0,61	0,5

Installation recommendations:

In accordance with IEC 60092-352

Minimum bending radius		Maximum pulling tension	Minium installation temperature
During installation	Fixed installed	50N x total	
8 x cable diameter	6 x cable diameter	Cross section of conductors	- 20 °C