

Okonite-FMR®

Type RHH or RHW-2

600/1000V Power and Control

Copper Conductor/90°C Wet or Dry

UL Listed For Cable Tray Use, Oil Res I (PR I), -40°C



A Stranded or Solid Uncoated
Copper Conductor
B Okonite-FMR Insulation

Insulation

Okonite-FMR is Okonite's trade name for its heat resistant, mechanically rugged black pigmented ethylene-propylene base insulating compound.

Applications

Okonite-FMR Type Power and Control Cables are recommended for general low voltage power and control applications. Okonite-FMR flame retardant insulated power cables may be used in generating plants, substations and industrial plants. These cables may be installed in wet or dry locations, indoors or outdoors, in raceways, underground ducts, cable tray (size 1/0 AWG and larger per NEC 392.10(B)(1)), or lashed to a messenger for aerial installation.

Specifications

Conductor: Uncoated soft copper per ASTM B-3. Solid per ASTM B-3. Sizes smaller than #8 are compress stranded per ASTM B-8. Sizes #8 and larger are compact stranded per ASTM B-496.

Insulation: Meets or exceeds all requirements of ICEA S-95-658, NEMA WC-70, and UL 44.

Product Features

- Sizes 1/0 AWG and larger pass the Vertical Tray Flame Test requirements of UL 1581 and are labeled For Cable Tray Use.
- Passes the ICEA T-29-520 210,000 Btu/hr. vertical tray flame test (sizes 6 AWG and larger).
- Passes the IEEE 383-74 Vertical Tray Flame Test.
- Passes the IEEE 1202 Vertical Tray Flame Test. (sizes 1/0 AWG and larger).
- Extreme heat resistance 90°C continuous rating; 130°C emergency overload rating; 250°C short circuit rating.
- Rated 90°C wet or dry.
- Exceptional resistance to deformation at high temperatures.
- Stable electrical properties.
- Low SIC and power factor.
- Low moisture absorption.
- Mechanically rugged.
- Resistant to weather.
- Smaller diameter.
- More flexible, easier to install, terminate, or splice than XLPE insulation.
- UL Listed, UL Rated VW-1 For CT Use 1/0 AWG & larger, Oil Res I (PR I), -40°C.
- UL Type RHH/RHW-2 2000V, cUL Type RW75/RW90 600V or 1000V, and cUL RWU90 1000V constructions are also available.

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Product Data
Section 3: Sheet 5

Catalog Number	Conductor Size AWG/kcmil	Number of Strands	Insulation Thickness - mils	Insulation Thickness - mm	Approx. O.D. - Inches	Approx. O.D. - mm	Approx. Net Weight lbs./1000'	Approx. Ship Weight lbs./1000'	90°C Wet (1)* NEC Ampacity	75°C Wet (1)* NEC Ampacity	ICEA Ampacity (2)
112-09-1061	14	1	45	1.14	0.16	4.06	22	27	15	15	24
112-09-1071	14	7	45	1.14	0.17	4.83	26	31	15	15	24
112-09-1091	12	1	45	1.14	0.18	4.57	31	36	20	20	30
112-09-1101	12	7	45	1.14	0.19	4.83	33	38	20	20	30
112-09-1121	10	1	45	1.14	0.20	5.08	44	49	30	30	42
112-09-1131	10	7	45	1.14	0.21	5.33	47	52	30	30	42
112-09-1191	8	7	60	1.52	0.26	6.60	73	78	55	30	55
112-09-1221	6	7	60	1.52	0.30	7.62	107	118	75	65	75
112-09-1251	4	7	60	1.52	0.34	8.64	160	171	95	85	97
112-09-1311	2	7	60	1.52	0.40	10.16	241	264	130	115	130
112-09-1331	1	19	80	2.03	0.47	11.94	314	337	150	130	156
112-09-1351	1/0	19	80	2.03	0.51	12.95	386	418	170	150	179
112-09-1371	2/0	19	80	2.03	0.55	13.97	476	508	195	175	204
112-09-1391	3/0	19	80	2.03	0.60	15.24	589	621	225	200	342
112-09-1411	4/0	19	80	2.03	0.65	16.51	730	769	260	230	278
112-09-1431	250	37	95	2.41	0.73	18.54	874	913	290	255	317
112-09-1471	350	37	95	2.41	0.82	20.83	1195	1250	350	310	384
112-09-1531	500	37	95	2.41	0.94	23.88	1669	1733	430	380	477
112-09-1591	750	61	110	2.79	1.13	28.70	2488	2577	535	475	598
112-09-1651	1000	61	110	2.79	1.28	32.51	3276	3392	615	545	689

Okonite's web site, www.okonite.com contains the most up to date information.

Ampacities

(1) Ampacities are based on Table 310.16 of the National Electrical Code and Table 1 of the CEC for these 90°C rated conductors at an ambient temperature of 30°C. The 75°C wet column is provided for additional information.

The ampacities shown apply to open runs of cable, installation in any approved raceway, direct burial in the earth, or as aerial cable on a messenger. Derating for more than three current carrying conductors within a raceway is in accordance with NEC Section 310.15(C)(1).

(2) Based on three (3) conductors in a single enclosed or exposed conduit. Capacities based on 40°C air ambient using ICEA methods. For 30°C ambient multiply values by 1.10; for 50°C multiply by .90. For other ambients or installation conditions refer to Engineering Data Book EHB.

For ampacities in cable tray, see NEC Section 392.80

To order a color other than black, change the last digit of the catalog number as follows:			
White	2	Orange	5
Red	3	Blue	6
Green	4	Yellow	7
Example: To order #14/SOL - Red, the catalog number would be 112-09-1063.			

*Current limited to 15, 20 and 30 amps per Section 240.4(D)(3) of the NEC for #14, #12 and #10 AWG, respectively.