Semiconductor Fuses
SITOR Fuse Links for Special Applications

For rectifiers in electrolysis systems

Technical specifications

Type		3NC5 531 [1]	3NC5 841 [1]	3NC5 840 [1]	3NC5 838 [1]
Operational class (IEC 60269)		aR			
Rated voltage U_n	V AC	800		1000	
Rated current I_n	A	350 [2]	630 [2]	600 [2]	800 [2]
Melting I^2t value I^2t_s (t_{vs} = 1 ms)	A^2s	66000	185000		360000
Breaking I^2t value I^2t_A at U_n	A^2s	260000	888000		1728000
Temperature rise at I_n (body center)	K	200	110		130
Power dissipation at I_n	W	80	145	150	170
Varying load factor *WL*		0.9			
Weight approx.	kg	0.67	1.2	1.4	1.2

Type		3NE9 440-6	3NE9 450	3NE6 437	3NE6 444	3NE9 450-7	3NE6 437-7
Operational class (IEC 60269)		gR	aR				
Rated voltage U_n	V AC	600		900		600	900
Rated current I_n [3]	A	850	1250 [4]	710 [4]	900 [4]	1250 [5]	710 [5]
Melting I^2t value I^2t_s (t_{vs} = 1 ms)	A^2s	400000		100000	400000		100000
Breaking I^2t value I^2t_A at U_n	A^2s	2480000		620000	1920000	2480000	620000
Temperature rise at I_n (body center)	K	74	80			105	110
Power dissipation at I_n	W	85	210	150	170	210	150
Varying load factor *WL*		1.0	0.9				
Weight approx.	kg	1.0			1.1	1.0	

[1] Maximum tightening torque:
- M10 thread (with indicator): 40 Nm
- M10 capped thread: 50 Nm, depth of screw entry ≥ 9 mm
- M24 × 1.5 thread: 60 Nm.

[2] Temperature of water-cooled busbar max. +45 C.

[3] Maximum tightening torque: M10 capped thread: 35 Nm, depth of screw entry ≥ 9 mm.

[4] Cooling air speed ≥ 2 m/s.

[5] Bottom (cooled) connection max. +60 °C, top connection (M10) max. +110 °C.