

BETA Protecting

Residual Current Protective Devices

Residual current operated circuit breakers

Application

Standards	Field of application	Required $I_{\Delta n}$ [mA]	Recommended Siemens residual current protective devices		
			5SM. (type A)	5SM3 SEQUENCE (type B/ type B+)	5SM3 ...-6KK12 SIGRES
DIN VDE 0100-410	Socket outlets ≤ 20 A and branch circuits for outdoor use ≤ 32 A	≤ 30	✓	--	--
DIN VDE 0100-482	Fire protection for particular risks or safety hazard	30, 300	✓	✓	--
DIN VDE 0100-551	Low-voltage generating sets	≤ 30	✓	--	--
DIN VDE 0100-559	Luminaires and lighting installations, display stands for lights	≤ 30	✓	--	--
DIN VDE 0100-701	Rooms with baths or showers, socket outlets in zone 3	≤ 30	✓	--	--
DIN VDE 0100-702	Swimming pools, zone 1 and 2	≤ 30	✓	--	✓
DIN VDE 0100-704	Construction sites, socket outlet current circuits (single-phase operation) up to 32 A and for hand-held equipment	≤ 30	✓ ✓	-- ✓	✓ ✓
DIN VDE 0100-705	Agricultural and general horticultural premises	≤ 500	✓	--	✓
	Socket outlet current circuits	≤ 30	✓	--	✓
DIN VDE 0100-706	Conductive areas with limited freedom of movement	≤ 30	✓	--	--
DIN VDE 0100-708	Feeding points for caravan parking spaces, camping sites	≤ 30	✓	--	--
DIN VDE 0100-710	Medical premises, depending on application group 1 or 2 and equipment	≤ 30 or ≤ 300	✓ ✓	✓ ✓	-- --
DIN VDE 0100-722	Portable buildings, vehicles, mobile homes for fairgrounds	≤ 500	--	--	✓
DIN VDE 0100-723	Classrooms with experiment equipment	≤ 30	--	✓	--
DIN VDE 0100-738	Fountains zone 2, general	≤ 500	✓	--	✓
	Socket outlets in zone 2	≤ 30	✓	--	✓
	Zones 0 and 1	≤ 30	✓	--	✓
DIN VDE 0100-739	Additional protection against direct contact in homes	≤ 30	✓	--	--
DIN VDE 0118-100	Mining plants	≤ 500	✓	--	✓
EN 50178 (VDE 0160)	Fitting of power installations with electronic equipment	General requirements for correct selection when using res. current protection	✓	✓	--
DIN VDE 0832-100	Traffic signals				
	• Class T1	≤ 300	✓	--	✓
	• Class U1	≤ 30	✓	--	✓
BG FE BGI 608	Selection and operation of electrical equipment on worksites General:				
	• Socket outlet circuits ≤ 32 A	≤ 30	✓	✓	✓
	• Socket outlet circuits > 32 A	≤ 500	✓	✓	✓
	Frequency-controlled equipment:				
	• With plug-and-socket device ≤ 32 A	≤ 30	--	✓	--
	• With plug-and-socket device > 32 A	≤ 500	--	✓	--
	Chemical industry and food processing industries	30 (recommended)	✓	✓	✓

Note:

For reasons of basic fire protection, we recommend a maximum rated residual current of 300 mA for residual current protective devices.