

Technical drawing of a TCR (Tyristor Controlled Reactor) showing various views and dimensions.

Views and Dimensions:

- Front View:** Shows the reactor body with dimensions 3768 (height), 3266 (width), and 3580 (width). It includes a magnetic clearance (HMC) and a base height of 968. The base has 6 mounting points with a height of 770.
- Top View:** Shows the circular top with a diameter of 1907. It includes a magnetic clearance (RMC) of 3250 and a base height of 1907. The base has 6 mounting points with a height of 770.
- Side View:** Shows the reactor body with dimensions 3580 (width), 4202 (height), and 968 (base height). It includes a magnetic clearance (HMC) and a base height of 770.
- Detail A:** Shows a cross-section of the reactor body with dimensions 140, 45, 47.5, 25, and 45. It includes a material specification: Material: Aluminium, thickness: 10mm.
- Detail B:** Shows a cross-section of the mounting base with dimensions 14, 40, and 51. It includes a material specification: Material: Aluminium, thickness: 16.
- Detail C:** Shows a cross-section of the earthing terminal with dimensions 14, 40, and 51. It includes a material specification: Material: Aluminium, thickness: 16.

Technical Data:

technical data:	
nominal system voltage	60 kV
max. continuous system voltage	69 kV
fundamental frequency	60 Hz
min. insulator creepage distance	1753 mm
separate source AC voltage	140 kV
lightning impulse (acr./ph-gr)	350 kV
rated inductance	458.38 mH
nom. fundamental current (Inom)	174 A
max. cont. current incl. harmonics	198 A
max. cont. harm. current(s)	1st 198 A
	3rd 2 A
	5th 1 A
	7th 1 A
	11th 1 A
max. short-circuit current (therm/mech)	0.4/2.6 kA (RMS/peak)
absorbed reactive power	6.75 MVar
weight	6900 kg

Terminal Details:

- min. center-to-center spacing (Dcc) = 6000 mm**
- terminal:** do not use the terminals as supports for the connecting bus work! for max. loads see instruction manual.
- surface treatment:** RTV silicone coating, grey

Files and Drawings:

- filename: G_OB_ISOL
- filetype: PART
- format: A3 / measures in mm
- scale: 1:50
- weight: 6900 kg
- client: ABB AB
- project: Big River&Gaberville SVC's
- type: TCR-458.38/198/350
- Tyristor Controlled Reactor (TCR21)
- drawing number: KD-01728-M010-00
- sheet 1 of 1
- sub.f.: -
- repl.by.: -

Notes:

- magnetic clearance:** The space within the magnetic clearance contour, prescribed by the dimensions Rmc and Hmc, shall not contain metallic parts. For larger metallic structures and metallic parts forming electrically closed loops, such as concrete rebar, grounding wiring and fencing, the magnetic clearance should be approximately doubled. Special attention should be paid to the proper functioning of electronic devices in the vicinity of the reactor.

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					order number: KD-01728		drawing number:								
					serial number: 01 to 14		KD-01728-M010-00								
							sheet 1								
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