

Pt100 slot thermometer (safe area or Ex e)

Order option A65

1 Description

The winding temperature can be permanently monitored using thermometers, so that when limit values are violated, measures can be taken. These slot thermometers are embedded between the upper and lower bars in the area of the hottest location of each winding phase, distributed uniformly around the circumference.

The thermometer is a temperature sensor with a platinum measurement resistor. The resistance changes with the temperature. For a constant current flowing through the measuring resistor, the voltage changes proportionally to the change in resistance. This means that the temperature can be derived from the voltage. At 0 °C, a measurement resistor with accuracy class B is calibrated to $100 \Omega \pm 0.12 \Omega$. The resistance values as a function of the temperature are defined in IEC 60751.

2 Technical data

Type	Slot thermometer integrated in the winding	
Measuring element	1 × Pt100 / B (IEC 60751)	
Motor series	HV C, HV M, Rolling, Mining	HV HP, HS-synchron, HS-modyn
Measuring element circuit	2-wire connection	3-wire connection
Circuit from the terminal box	2, 3 or 4-wire connection	3 or 4-wire connection
Scope of delivery	6 slot resistance thermometers, wired up to the auxiliary terminal box	
Evaluation unit	Not included in the scope of supply	
Can be additionally ordered	Calibration certificate	

The information provided in the technical details in the product-specific data sheets have priority.

Department responsible LDA OPS EU EN	Technical reference Pfefferkorn	Created by Hausruckinger	Approved by Bolz	Project			
SIEMENS	Document type Pt100 slot thermometer (safe area or Ex e)	Document status Released		Customer tag			
	SIMOTICS HV C/M/HP, HS-synchron/modyn, Rolling, Mining Order option A65	Document number A5E51655198B		Rev. AA	Edition date (YYYY-MM-DD) 2022-03-14	Language en	Page 1/1
© Siemens 2022							