YT353120

Temperature sensors ● Switching amplifiers

Measuring transducer, temperature sensor, 118x40x40mm, -40-300°C, PT100, 4 digits, 12-32V DC, 2x PNP NC/NO, 0-10V/4-20mA, M12 plug connector, IP65, PA 6.6 (plastic), LED

Article number YT353120 is a sophisticated temperature sensor designed for demanding applications in the automation industry. This intelligent temperature sensor is characterized by an impressive display range and measuring range of -40 to +300 °C, making it suitable for a wide range of applications in a variety of industries.

A straightforward feature of the YT353120 sensor is its wide operating temperature range, which allows it to work in extreme environments. The permissible ambient temperature ranges from -20 to +80 °C, meaning that the sensor works reliably in many industrial environments. The robust M12 connector ensures a secure connection and simplifies the installation of the sensor. With a compact design of 40 mm wide, 118 mm high and 40 mm long, the sensor fits easily into various applications and takes up little space.

The IP65 degree of protection ensures that the sensor is dust-tight and protected against water jets, which ensures high reliability in harsh environments. The sensor works with an operating voltage of 12 to 32 V DC, which makes it flexible for use in various power supply systems. The switching function can be configured as normally closed (nc) or normally open, and the rated switching current is 1 A, which enables a wide range of connection scenarios.

Particularly noteworthy is the mounting method of the sensor, which is characterized by clamp mounting. This makes it easier to install and replace the sensor in existing systems. Subsequently, the sensor and its functions are ready to perform precise temperature measurements in industrial applications.

In summary, the YT353120 offers a combination of performance and flexibility. It is ideal for temperature monitoring applications in ovens, machines and for monitoring fans and air. With its intelligent functions and high accuracy, this sensor is an excellent choice for electrical engineering professionals who need reliable and precise temperature measurement solutions.

Electrical features

Number of decades	4
Number of switching outputs	2
Display	LED display
Display range, temperature	-40 - 300 °C
Type of switching function	Normally closed contact/normally open contact
Type of analog output	0 - 10V | 4 - 20mA
Type of analog input	PT100
Type of electrical connection	Connector M12
Type of switching output	PNP
Turn-off delay	0 - 20 s
Rated switching current	1000 mA
Turn-on delay	0 - 20 s
Setting procedure	Parameterization
Characteristic curve deviation	0.25 %
No-load current	60 mA
Max. continuous current	1 A
Measuring range, temperature	-40 - 300 °C
Relative linearity deviation	0.25 %
Relative repeat accuracy	0.1 %
Switching frequency	0.12 Hz
Temperature drift, percent per Kelvin	0.02 %/K
Operating voltage (DC)	12 - 32 V
ardSOCA_ElektrischerAnschluss	M12 plug connector
ardSOCA_Betriebsspannung	12-32VDC
ardTEEL_Schutzfunktionen	Reverse polarity protection | Short circuit protection

Mechanical features

Width	40 mm
Height	118 mm
Length	40 mm
Mounting method	Mounting clip
Degree of protection (IP)	IP65
Degree of protection (IP), front side	IP65
Housing material	PA 6.6 (synthetic)
Ambient temperature	-20 - 80 °C
ardSOCA_Abmessungen	40x40x118mm

Other features

Version	Temperature sensor
ardTE00_Anwendungen	Zweipunktreglung

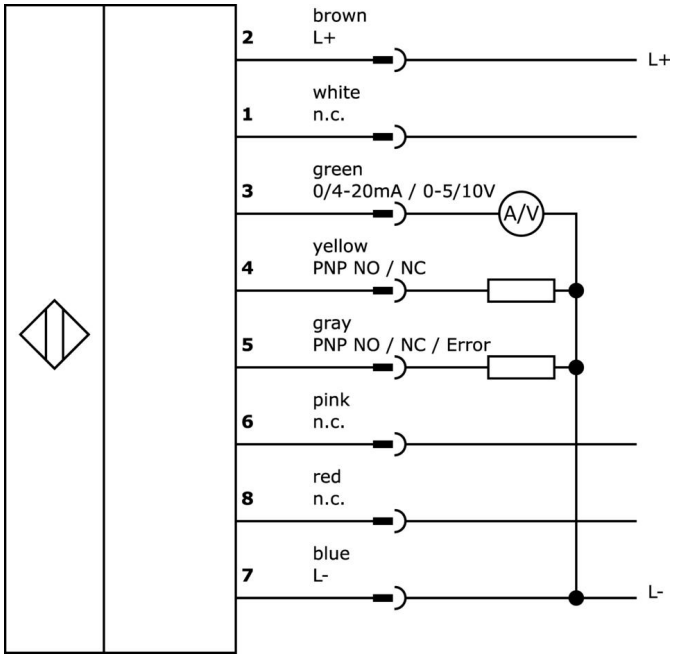
Classification

ETIM 8	EC002475 Current transducer

More

IPF Product Group	310 temperature sensors
packaging dimensions	160 x 99 x 60 mm
gross weight	340 g
Customs tariff number	85437090
WEEE number	40951076
OzDS-compliant	Yes
POP-compliant	Yes
Reach-compliant	Yes
RoHS-compliant	Yes

Connection



Extract accessories program

VK205A21

Connection cable, 2m, M12 Female (socket) 8pin Angular, Free conductor end, 8x0.25mm², PUR (Polyurethane), Ø6.6mm, 30V, -25-90°C, IP67, Shielded, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone.. .

VK205A25

Connection cable, 2m, M12 socket 8-pin straight, free cable end, 8x0.25mm², PUR (polyurethane), Ø6.6mm, 30V, -25-90°C, IP67, shielded, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

AY000152

accessories sensor, Ø38mm, Plastic, For sensor 38mm, for Wall mounting, Screw mounting

VK200A25

Connection cable, 2m, M12 Female (socket) 8pin Straight, Free conductor end, 8wire, PUR (Polyurethane), Ø5.9mm, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

VK500A25

Connection cable, 5m, M12 Female (socket) 8pin Straight, Free conductor end, 8wire, PUR (Polyurethane), Ø5.9mm, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

YT036020

Temperature sensor, Ø3mm 100long, PT100, 4-wire, medium temperature -30-350°C, connection to amplifier, M12 plug connector

YT036021

Temperature sensor, Ø3mm 150long, PT100, 4-wire, medium temperature -30-350°C, connection to amplifier, M12 plug connector

AD000011

Connection cable RS232/USB, 1.5m, Optocoupler Straight, USB-A Male (connector) 4pin Straight

AT000006

Documentation temperature, Test protocol, Number of measurement points 10, Suitable for YT35

You can find further accessories on our homepage

Installation

Mounting / installation may only be carried out by a qualified electrician!

Disposal

WEEE number according to § 6 para. 3 ElektroG: 40951076

Safety warnings

/ Before initial operation, please make sure to follow all safety instructions that may be provided in the product information.

/ Never use these devices in applications where the safety of a person depends on their functionality.

/ Any software, drivers or IODD files that may be required to operate your device can be downloaded free of charge from our homepage: www.ipf-electronic.com