Data sheet



Temperature sensor

AKS 11

Color coded

Description

AKS 11 is a Pt 1000 temperature sensor for temperature measurement, logging, and monitoring in HVACR systems. It is used together with controllers in refrigeration, air conditioning, and heating applications. The sensor operates as part of the sensing and control layer, providing temperature input for system control functions. Color-coded versions support identification of sensor positions within the system. The sensor helps maintain reliable temperature monitoring across cooling and heating installations.

Features & benefits

- Pt 1000 temperature sensing element.
- EN60751 Class B accuracy.
- Color-coded cable options for simplified wiring.
- IP67 enclosure.
- Fast response time with 10 s time constant on Cu tube.
- Wide operating temperature range.
- Suitable for HACCP applications.

Applications

- Refrigeration
- Air conditioning
- Heating
- Cold rooms

Ordering

Product code numbers

Type	Cable	Packing Qty.	Code no.
AKS 11 Single type Black cable	3.5 m	1	**084N0003**
	5.5 m	1	**084N0005**
	8.5 m	1	**084N0008**
AKS 11 Industrial Pack Black cable	1.5 m	150	**084N0026**
	3.5 m	110	**084N0027**
	5.5 m	70	**084N0028**
	8.5 m	50	**084N0029**
AKS 11 Single AMP plug Black cable	5.5 m	1	**084N0043**
	8.5 m	1	**084N0044**
AKS 11 Industrial Pack AMP plug Black cable	3.5 m	110	**084N0050**
	5.5 m	70	**084N0051**
	8.5 m	50	**084N0052**

AKS 11 Color coded cable	Blue	S1 - Coil in	8.5 m	1	**097U0063**
	Red	S2 - Coil out	8.5 m	1	**097U0064**
	Purple	S3 - Return air	8.5 m	1	**097U0065**
	Green	S4 - Discharge air	8.5 m	1	**097U0066**
	Orange	S5 - Defrost terminator	8.5 m	1	**097U0067**

Note: For a detailed overview of our existing code numbers, please visit the Danfoss Product Store at store.danfoss.com. You can use the filtering options to find the right sensor for your specific needs.

Product details

General data

Technical data

Nominal resistance	1000 ohm at 0 °C
Measuring accuracy	Class B
Temperature range	-40 – 100 °C
Cable material	PVC, 2 x 0.22 mm²
Sensor clips	AISI 304 + PA6
Time constant	10 sec. on Cu tube
Enclosure	IP67
AMP-Plug (selected sensors only)	AMP ital mod 2, Housing 280358-0 Crimp contact 280708-2

R (Typ.) [Ohm]	Temp. [°C]	Temp. [°F]
1117	30	86
1078	20	68
1039	10	50
1000	0	32
961	-10	14
922	-20	-4
882	-30	-22

Cable resistance @ 20 °C:
PVC 2 x 0.22 mm² (Resistance per conductor R1 = 78.2 Ohm/km)
The constant conductor resistance: R = 2 x R1
The total resistance in the sensor circuit is therefore: R + RTD

Certificates, declarations and approvals

The list contains all certificates, declarations, and approvals for this product type. Individual code number may have some or all of these approvals, and certain local approvals may not appear on the list.

When you click on the link you will be directed to the latest version of the 'Declaration of Conformity'. Products developed and sold before this date of issue conform to the directives/standards in force at the time of their sale.

Approval type	Title	Issuer	Approval topic
Manufacturer's Declaration	Danfoss MD 084R1022.01	Danfoss	China RoHS
UA Declaration	Danfoss UA 9025	Danfoss	UA RoHS
Pressure Safety Certificate	LLC CDC EURO-TYSK UA.TR.089.1015.05-22	LLC CDC EURO TYSK - Ukraine	Pressure
EU-UK Declaration	Danfoss EU-UK 084R1019.04	Danfoss	UK RoHS, EU RoHS, EMC
UA Declaration	Danfoss UA 2024-07-25 cooling sensors	Danfoss	EMC, LVD
Manufacturer's Declaration	Simple Apparatus	Danfoss	Simples apparatus
Export Control Declaration	Pressure & Temperature Sensors	Danfoss	
EU Declaration	PPWR_Packaging EU PL04	Danfoss	Packaging

Contact details

Online support

Danfoss offers a wide range of support along with our products, including digital information, software, mobile apps and expert guidance. See the possibilities below.

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