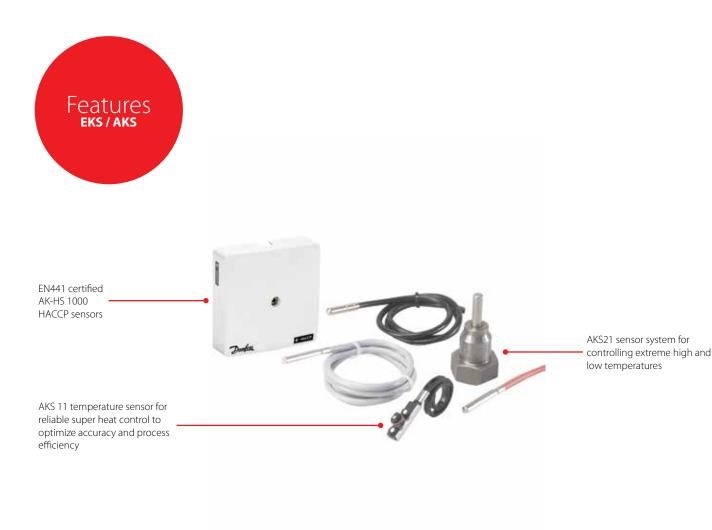
## EKS / AKS, Temperature sensors

AKS temperature sensors are used for exacting applications within air-conditioning as well as commercial and industrial refrigeration applications.

The Pt 1000 sensor element meets the DIN/EN 60751 class B requirements and ensures an accurate and reliable temperature signal applicable for regulation, safety and data logging.

EKS temperature sensors are a family of cost efficient temperature sensors based on thermistors with NTC or PTC characteristics which are used with Danfoss EKC controllers.



## Facts

• AKS 11 is designed for easy installation and optimized for demanding control functions like liquid injection control in evaporators where a reliable sensor is a must

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- AKS 12 is the all-round cable temperature sensor to be used for plain temperature monitoring and control purposes
- AKS 21 is the ultimate sensor for -70 – 180 °C anywhere in the refrigeration plant and is available in various designs (cable and B-head) and with various accessories like sensor pockets

- AK-HS 1000 is the first choice for a temperature sensor for monitoring and HACCP data logging. The sensor design makes it simulate a refrigerated product what enable a realistic temperature signal is transmitted to a HACCP data logger
- EKS comes with PTC 1000  $\Omega$  (EKS 111), NTC 5000  $\Omega$  (EKS 211), or NTC 1000  $\Omega$  (EKS 221) with various cable lengths

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<b>K-HS - Tem</b> Ordering	perature sense	ors for monitoring	and data loggi	ng in HACCP syste	ms	٢	0
pe	Signal	Temperature range [°C]	Measuring accuracy	Enclosure	Cable length [m]	Code no.	
-HS 1000	Pt 1000	-30 – 50	EN 60751 Class B	IP 54	5.5	084N1007	0
KS - Tempe	erature sensors	s for measuring air	temperatures			* <b>~~</b> D	C
		llers types EKC 101, EKC 2	01, EKC 301, CC and	AK.			
		ollers, types EKC and CC. Temperature range		Electrical	Cable length		(
уре	Signal	[°C]	Sensor tube	connection	[m]	Code no.	
	PTC 1000	-55 - 100	Round	Cable with pins	1.5	084N1178	
KS 111	PTC 1000 PTC 1000	-55 – 100 -55 – 100	Round	Cable with pins Cable with AMP-plug	3.5	084N1179 084N1181	(
	PTC 1000	-55 – 100	Round	Cable with AMP-plug	3.5	084N1182	
EKS 211	NTC 5000	-40 - 80	Round	Cable	1.5	084N1220	
(3211	NTC 5000	-40 - 80	Round	Cable	3.5	084N1221	
ay not be used for to	ood safety logs and regulat	tion of superneat					(
							C
EKS - Tempe	erature sensors	s for measuring ten	nperatures				
ne sensor chara	acteristics matches	to OPTYMA room control	llers and MCX unit co	ontrollers.			
	acteristics matches Signal	Temperature range	llers and MCX unit co Sensor tube	Electrical	Cable length	Code no.	1
	Signal	Temperature range [°C]	Sensor tube	Electrical connection	[m]		1
уре		Temperature range		Electrical		<b>Code no.</b> 084N3210 084N3209	1
ype KS 221	Signal NTC 10000 NTC 10000	Temperature range [°C] -50 – 120	Sensor tube Round	Electrical connection Cable	[ <b>m</b> ] 3.5	084N3210	1
ype KS 221	Signal NTC 10000 NTC 10000	Temperature range [°C] -50 – 120	Sensor tube Round	Electrical connection Cable	[ <b>m</b> ] 3.5	084N3210	1
<sup>;</sup> уре :KS 221	Signal NTC 10000 NTC 10000	Temperature range [°C] -50 – 120	Sensor tube Round	Electrical connection Cable	[ <b>m</b> ] 3.5	084N3210	
ype KS 221	Signal NTC 10000 NTC 10000	Temperature range [°C] -50 – 120	Sensor tube Round	Electrical connection Cable	[ <b>m</b> ] 3.5	084N3210	1
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KS 221 ensor house in therm AKS - Tempe neasuring t Recommended	Signal NTC 10000 NTC 10000 no plastic rubber erature sensors temperature for accurate tempe	Temperature range [°C] -50 – 120 -50 – 120 s for	Sensor tube Round Round	Electrical connection Cable	[ <b>m</b> ] 3.5	084N3210	1
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ype KS 221 ensor house in therm KKS - Tempe neasuring t ecommended : uperheating, fo ype KS 12 KS 11 KS 21A KS 21A KS 21M KS 21W	Signal           NTC 10000           NTC 10000           NTC 10000           no plastic rubber	Temperature range [°C]           -50 - 120           -50 - 120           sfor           sfor           erature measurement in other important applicati           Measure range [°C]           -40 - 80           -50 - 100           -50 - 100           -50 - 100           -50 - 100           -70 - 180           -70 - 180           -70 - 180           -70 - 180           -70 - 180           -70 - 180	Sensor tube Round Round Sensor tube Sensor tube Concave Concave Concave Concave Round Roun	Electrical connection         Cable         Cable         Cable         Electrical connection         Cable         AMP plug         Cable         Cable	[m] 3.5 8.5	084N3210 084N3209 Code no. 084N0036 084N0045 084N0003 084N0005 084N0005 084N0008 084N0008 084N0008 084N2007 084N2007 084N2008 084N2024 084N2024	
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ype KS 221 ensor house in therm AKS - Tempe neasuring t ecommended : uperheating, fo ype KS 12 KS 11 KS 21A KS 21A KS 21M KS 21W	Signal           NTC 10000           NTC 10000           NTC 10000           no plastic rubber	Temperature range [°C]           -50 - 120           -50 - 120           sfor           sfor           erature measurement in other important applicati           Measure range [°C]           -40 - 80           -50 - 100           -50 - 100           -50 - 100           -50 - 100           -70 - 180           -70 - 180           -70 - 180           -70 - 180           -70 - 180           -70 - 180	Sensor tube Round Round Sensor tube Sensor tube Concave Concave Concave Concave Round Roun	Electrical connection         Cable         Cable         Cable         Electrical connection         Cable         AMP plug         Cable         Cable	[m] 3.5 8.5	084N3210 084N3209 Code no. 084N0036 084N0045 084N0003 084N0005 084N0005 084N0008 084N0008 084N0008 084N2007 084N2007 084N2008 084N2024 084N2024	1 1 1 1
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Type         SKS 221         Siensor house in therm         AKS - Tempe         measuring t         Recommended :         Superheating, fo         Type         AKS 12         AKS 11         AKS 21A         AKS 21M         AKS 21W	Signal           NTC 10000           NTC 10000           NTC 10000           no plastic rubber	Temperature range [°C]           -50 - 120           -50 - 120           sfor           sfor           erature measurement in other important applicati           Measure range [°C]           -40 - 80           -50 - 100           -50 - 100           -50 - 100           -50 - 100           -70 - 180           -70 - 180           -70 - 180           -70 - 180           -70 - 180           -70 - 180	Sensor tube Round Round Sensor tube Sensor tube Concave Concave Concave Concave Round Roun	Electrical connection         Cable         Cable         Cable         Electrical connection         Cable         AMP plug         Cable         Cable	[m] 3.5 8.5	084N3210 084N3209 Code no. 084N0036 084N0045 084N0003 084N0005 084N0005 084N0008 084N0008 084N0008 084N2007 084N2007 084N2008 084N2024 084N2024	•
Type         SKS 221         Siensor house in therm         AKS - Tempe         measuring t         Recommended :         Superheating, fo         Type         AKS 12         AKS 11         AKS 21A         AKS 21M         AKS 21W	Signal           NTC 10000           NTC 10000           NTC 10000           no plastic rubber	Temperature range [°C]           -50 - 120           -50 - 120           sfor           sfor           erature measurement in other important applicati           Measure range [°C]           -40 - 80           -50 - 100           -50 - 100           -50 - 100           -50 - 100           -70 - 180           -70 - 180           -70 - 180           -70 - 180           -70 - 180           -70 - 180	Sensor tube Round Round Sensor tube Sensor tube Concave Concave Concave Concave Round Roun	Electrical connection         Cable         Cable         Cable         Electrical connection         Cable         AMP plug         Cable         Cable	[m] 3.5 8.5	084N3210 084N3209 Code no. 084N0036 084N0045 084N0003 084N0005 084N0005 084N0008 084N0008 084N0008 084N2007 084N2007 084N2008 084N2024 084N2024	•
Type EKS 221 Sensor house in therm AKS - Tempe measuring t Recommended Superheating, fo Type AKS 12 AKS 11 AKS 21A AKS 21M AKS 21W	Signal           NTC 10000           NTC 10000           NTC 10000           no plastic rubber	Temperature range [°C]           -50 - 120           -50 - 120           sfor           sfor           erature measurement in other important applicati           Measure range [°C]           -40 - 80           -50 - 100           -50 - 100           -50 - 100           -50 - 100           -70 - 180           -70 - 180           -70 - 180           -70 - 180           -70 - 180           -70 - 180	Sensor tube Round Round Sensor tube Sensor tube Concave Concave Concave Concave Round Roun	Electrical connection         Cable         Cable         Cable         Electrical connection         Cable         AMP plug         Cable         Cable	[m] 3.5 8.5	084N3210 084N3209 Code no. 084N0036 084N0045 084N0003 084N0005 084N0005 084N0008 084N0008 084N0008 084N2007 084N2007 084N2008 084N2024 084N2024	•
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ype KS 221 ensor house in therm AKS - Tempe measuring t Recommended : uperheating, fo ype KS 12 KS 12 KS 21A KS 21A KS 21M KS 21W	Signal           NTC 10000           NTC 10000           NTC 10000           no plastic rubber	Temperature range [°C]           -50 - 120           -50 - 120           sfor           sfor           erature measurement in other important applicati           Measure range [°C]           -40 - 80           -50 - 100           -50 - 100           -50 - 100           -50 - 100           -70 - 180           -70 - 180           -70 - 180           -70 - 180           -70 - 180           -70 - 180	Sensor tube Round Round Sensor tube Sensor tube Concave Concave Concave Concave Round Roun	Electrical connection         Cable         Cable         Cable         Electrical connection         Cable         AMP plug         Cable         Cable	[m] 3.5 8.5	084N3210 084N3209 Code no. 084N0036 084N0045 084N0003 084N0005 084N0005 084N0008 084N0008 084N0008 084N2007 084N2007 084N2008 084N2024 084N2024	•