Data sheet

SH Controller kit

EKE 100 1VK

For cold room applications

Description

The SH controller kit is a comprehensive equipment package designed for controlling ETS 5M electronic expansion valves across various applications, including air conditioning, commercial refrigeration, and food retail.

It is ideal for situations requiring precise superheat control, effectively regulating superheat to the lowest possible level in a short time frame. By optimally managing the evaporator's superheat, even amidst significant load variations, the SCK helps reduce energy consumption and operational costs.

Ordering

Product code numbers

Type	Material Description	Code number
EKE 100 1VK	Kit EKE100 superheat controller	080G9100

For ordering valves, visit Danfoss online for selecting ETS 5M valves.

Note: Coil for ETS 5M is included in the kit. Items included in the kit are shown in service codes list.

Accessories code numbers

Description	Code number
KoolKey EKA 200	080N0020
EKE 100 service cable	080G5067
Backup Power module EKE 2U	080G5555
Manual coil for ETS 5M / ETS 5T	034G3803
Accessory Power supply AK–PS 063 STEP 3	080Z0057
Accessory Power supply AK–PS 130 STEP 3	080Z0058
Accessory Power supply AK–PS 250 STEP 3	080Z0059

For more details visit Danfoss online.

Service codes

Description	Code number
Superheat controller EKE 100 1V IP20 with integrated display	080G5052
Pressure transmitter DST P110	075G1013
Accessory cable 10M round Packard for pressure transmitter	064G0950
Temperature sensor AKS 11	084N0008
Bipolar coil for ETS 5M	034G3863

Product details

General data

Figure: Superheat controller EKE 100 1V

Table: Superheat controller EKE 100 1V

Name	Superheat Controller EKE 100 1V
Code number	080G5052
Supply voltage [V]	24 V AC / DC(1), 50 / 60 Hz, SELV(2)
Power consumption (for ETS 5M bipolar)	10 VA / 5 W
Number of valve outputs	1 stepper motor valve
Valve type	Bipolar stepper valve
Storage temperature	-30 – 80 °C / -22 – 176 °F
Operating temperature	-20 – 70 °C / -4 – 158 °F
Humidity	<90% RH, non–condensing
Enclosure rating IP	IP20

(1) The unit is suitable for use on a circuit capable of delivering not more than 50A RMS (symmetrical Amperes)

(2)For US and Canada, use class 2 power supply

Figure: Pressure transmitter DST P110

Table: Pressure transmitter DST P110

Name	Pressure transmitter DST P110
Code number	075G1013
Pressure range [bar]	-1 – 12 bar
Supply voltage	5 V DC
Output signal	Ratio metric of supply voltage (10 – 90% / 0.5V DC – 4.5V DC)
Electrical connection	Round packard metri-pack 3 pin (standard 150.2 SERIES)
Pressure connection type	UNF 7 / 16–20 (standard SAE J513 45° flare)
Medium temperature range	-40 – 135 °C
Ambient temperature range	-40 – 125 °C
Enclosure with mating connector	IP67

Figure: Accessory cable 10 m round packard

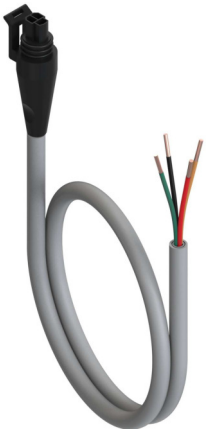

Table: Accessory cable 10 m round packard (pressure transmitter accessory)

Name	Accessory cable 10 m round packard (pressure transmitter accessory)
Code number	064G0950
Electrical connection	Round packard metri-pack
Enclosure	IP67

Figure: Temperature sensor AKS 11

Table: Temperature Sensor AKS 11

Name	Temperature sensor AKS 11
Code number	084N0008
Measuring range	-40 – 100 °C
Sensor element	PT 1000 (standard EN 60751 class B)
Cable length	8.5m (P VC 2 x 0.22 mm^2)
Enclosure	IP67

Figure: Coil for ETS 5M

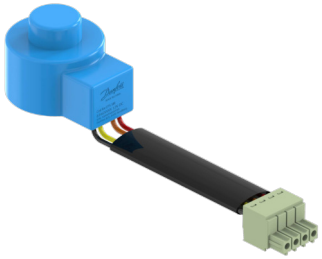

Table: Coil for ETS 5M

Name	Coil for ETS 5M
Code number	034G3863
Class of Insulation	B
Motor type	Bi–polar
Supply voltage	12 V DC +10% / -15%
Coil resistance	50 ohm ± 6%
Rated current	0.24 A
Cable length	2.7 m
Electrical connector	MC–RA3.5H04C–0001
Enclosure rating IP	IP67

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	Certification body	Approval topic
Export Control Declaration	Electronic Superheat Controller and Electronic Valve driver and injection controller	Danfoss	

Contact details

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