



SH controller kit



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

| Description | Code number |
|-------------------------------|-------------|
| SH Controller Kit EKE 100 1VK | 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 | 5V 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 to 135 °C |
| Ambient temperature range | -40 to 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 to 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

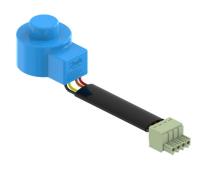


Table: Coil for ETS 5M

| Name | Coil for ETS 5M |
|----------------------|---------------------|
| Code number | 034G3863 |
| Class of Insulation | В |
| 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 |



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.



The Danfoss Design center

Discover the Design Center, our advanced digital platform that streamlines product selection. With integrated tools and enhanced type pages, it's simpler than ever to access product information and documentation, and to select the right products. Check the availability of Danfoss products at partner locations and enjoy seamless transitions from selection to purchase with our basket-to-basket functionality. Whether you're buying from our distributors or directly from the Product Store, the Design Center simplifies your experience. Learn more at: <a href="design:de



The Danfoss product store

The Danfoss Product Store is a one-stop shop available 24/7 for our customers, no matter where you are in the world or what area of industry you work in. Browse our catalog, check product details and documentation, view your prices and product availability, and quickly finalize your purchase. Start browsing at: store.danfoss.com.



Danfoss Partner Portal/Product Data tool

Designed to support you with easy access to product data extracts, essential resources, tools, and information. The Partner Portal provides a centralized hub for product documentation, training materials, marketing assets, and technical support, ensuring you have everything you need to succeed and grow your business with Danfoss. The Partner Portal is available 24/7 at: partnerdanfoss.com and is ready to support your business.



Find technical documentation

Find technical documentation you need to get your project up running. Get direct access to our official collection of data sheets, certificates and declarations, manuals and guides, 3D models and drawings, case stories, brochures, and much more. Start searching now at: <u>documentation.danfoss.com</u>.



Danfoss Learning

Danfoss Learning is a free online learning platform. It features courses and materials specifically designed to help engineers, installers, service technicians, and wholesalers better understand the products, applications industry topics, and trends that will help you do your job better Find your local Danfoss website here: learning.danfoss.com.



Get local information and support

Local Danfoss websites are the main sources for help and information about our company and products. Find product availability, get the latest reginal news, or connect with a nearby expert - all in your own language. Find your local Danfoss website here: danfoss.com.

Danfoss A/S

Climate Solutions . danfoss.com . +45 7488 2222

Any information, including, but not limited to information on selection of product, its application or use, product design, weight, dimensions, capacity or any other technical data in product manuals, catalogues description, advertisements, etc. and whether made available in writing, orally, electronically, online or via download, shall be considered informative, and is only binding if and to the extent, explicit reference is made in a quotation or order confirmation. Danfoss cannot accept any responsibility for possible errors in catalogues, brochures, videos and other material. Danfoss reserves the right to alter its products without notice. This also applies to products ordered but not delivered provided that such alterations can be made without changes to form, fit or function of the products. All trademarks in this material are property of Danfoss A/S or Danfoss group companies. Danfoss and the Danfoss logo are trademarks of Danfoss A/S. All rights reserved.