Danfoss ADAP-KOOL

Niagara Framework Driver

The Danfoss ADAP-KOOL driver connects Danfoss refrigeration systems directly to Tridium Niagara via TCP/IP, enabling unified management of HVACR installations from a single Niagara interface.

The driver communicates with ADAP-KOOL controllers through AK-SM system managers, which serve as gateways to all downstream controllers on LON-RS485, LON-TP, Modbus, and Danbuss networks. This eliminates the need for additional protocol converters.

Devices and points are discovered automatically. Point group reading retrieves up to 50 points per request, minimizing network traffic and maximizing polling efficiency for large refrigeration installations.

The driver connects via standard TCP/IP to AK-SM system managers, requiring no additional hardware or gateways.

- ✓ Communicates with all ADAP-KOOL series controllers
- ✓ Connects via TCP/IP to system managers
- ✓ Supports LON-RS485, LON-TP, Modbus, and Danbuss protocols
- ✓ Automatic device and point discovery
- ✓ Point group reading for bandwidth savings
- ✓ Reads up to 50 points per request
- ✓ No additional gateways required
- ✓ No annual fees
- ✓ Free technical support and upgrades

Danfoss ADAP-KOOL System Architecture

SUPPORTED DEVICES

AK-SM 350	AK-CC 460	AK-PC 551	AK-PC 783A	EKC 326A
AK-SM 720	AK-CC 525A	AK-PC 560	EKC 202A	EKC 361
AK-SM 800AL	AK-CC 550	AK-CH 650A	EKC 202B	EKC 366
AK-SM 810	AK-CC 550A	AK-PC 651	EKC 202C	EKC 367
AK-SM 820	AK-CC 550B	AK-PC 710	EKC 202D	EKE 1A
AK-SM 850	AK-CC 750	AK-PC 772	EKC 302D	EKE 1B
AK-SM 880	AK-PI 200	AK-PC 772A	EKC 313	EKE 1C
AK-CC 210[1]	AK-PC 351	AK-PC 781	EKC 315A	
AK-CC 240	AK-PC 420	AK-PC 781A	EKC 316A	
AK-CC 350	AK-PC 520	AK-PC 782A	EKD 316A	
AK-CC 450	AK-PC 530	AK-PC 783	EKC 319A	

SYSTEM REQUIREMENTS

- ✓ Niagara framework 4.8 or later, including OEM versions
- ✓ JACE or Supervisor with TCP/IP network access to AK-SM system managers
- ✓ Danfoss ADAP-KOOL driver license

CONNECTIVITY

TCP/IP

Connect Niagara to Danfoss ADAP-KOOL controllers via TCP/IP through AK-SM system managers. The system manager acts as a gateway to all downstream controllers on LON-RS485, LON-TP, Modbus, or Danbuss networks. No additional gateways required.

ORDERING INFORMATION

Part Number	Description
DAK-J-10	ADAP-KOOL for JACE, 10 devices
DAK-J-20	ADAP-KOOL for JACE, 20 devices
DAK-J-UNL	ADAP-KOOL for JACE, unlimited devices
DAK-SUP	ADAP-KOOL for Supervisor, first 10 devices
DAK-SUP-10	ADAP-KOOL for Supervisor, extra 10 devices

[1] Field devices connected via AK-SM system managers