

Service Guide

Supermarket parts list

ADAP-KOOL® Refrigeration Control System



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Part#	Description
AK-SM 800A Controllers	
080Z4021	AK-SM 850A RS485
080Z4024	AK-SM 820A
080Z4028	AK-SM 880A RS485
080Z4029	AK-SM 880A TP78
Cell Modem	
193G3144	LX60-WIFI-NA Cellular Modem (no SIM card)
Input/Output Boards **universal terminal strip	
080Z0010	AK2 Module Type AK2-XM 205A (8AI/8DO)
080Z0011	AK2 Module Type AK2-XM 204A (8DO)
080Z0018	AK2 Module Type AK2-XM 204B (8DO with override)
080Z0017	AK2 Module Type AK2-XM 205B (8AI/8DO with override)
080Z0007	AK2 Module Type AK2-XM 101A (8AI)
080Z0008	AK2 Module Type AK2-XM 102A (8DI, Low volt)
080Z0013	AK2 Module Type AK2-XM 102B (8DI, High volt)
080Z0020	AK2 Module AK2-XM107A - 8 Pulse input module
080Z0022	AK2 Module AK2-XM208B - 4 Stepper module
080Z0023	AK-XM 208C, Contr. 8AI & 4 Stepper out
080Z0032	AK2 Module AK2-XM103A -(4AI, 4VO)
080Z0061	AK-CM 101A Communication Module (LON TP-78)
080Z0063	AK-CM 101C Communication Module (LON RS485)
080Z0064	AK-CM 102, Control, Comm. Module for AK-PC IO extension
080Z0290	DIN Rail For AK2 Module Mounting 1 Meter
Power Supplies	
080Z0055	AK2 Din Rail Power Supply (AKPS 250) - 24 V DC - 60 VA Replaces - 080Z0052
080Z0053	AK2 Din Rail Power Supply (AKPS 75) - 24 V DC - 18 VA (Can power one com module and combo board)
HVAC Controllers	
080Z2117	RTC to AK2 board conversion kit
I/O Enclosures	
AK2IO16	AK2 Enclosure for 2 rows of 4 full size Modules Includes Power Supply and 2 AK2 Comm Modules 25x30x5
AK2IO8	AK2 Enclosure for 1 row of 4 full size Modules Includes Power Supply and 1AK2 Comm Module 13x30x5
AK2RTCB	AK2 Comm. Mod. + AK2 XM 205B In RTC Box Filtered Power Input (24VAC ONLY, no power supply included) 12"x12"
AK2RTCB-2	AK2 Comm. Mod. RTC Filtered Power V.2 (contains 080z0061, 080z0017, 080z0053)
080Z2165	12" X 24" enclosure - 080z0055 PS, w / Com Module, Combo Board
080Z2118	AK2 IO Enclosure RS485, PS. & 080Z0063
080Z2119	AK2 IO Enclosure RS485, PS. & 2x080Z0063
080Z2188	AK2 Roof Top Panel RS485 w. PS
080Z2184	RS485 version of the AK2RTCB
080Z2114	12" x 24" enclosure with AK-PS 075 only
Gas/Refrigerant Leak Detectors	
080Z2803	DGS-SC (R1234ze, R454c, R1234yf, R454a, R452A, R454b, R513a)
080Z2804	DGS-SC (R407F, R416a, R417a, R407A, R422a, R427a, R449A, R437a, R134A, R438a, R422D)
080Z2805	DGS-SC (R448A, R125, R404A, R32, R507A, R434a, R410A, R452b, R407C, R143b)
080Z2806	DGS-PE (Propane)
080Z2800	DGS-IR-CO ₂
080Z2801	DGS-IR-CO ₂ 5m

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080Z2802	DGS-IR 2 * CO ₂ 5m
080Z2809	DGS-SC (R1234ze, R454c, R1234yf, R454a, R452A, R454b, R513a) w/B&L
080Z2810	DGS-SC (R407F, R416a, R417a, R407A, R422a, R427a, R449A, R437a, R134A, R438a, R422D) w/B&L
080Z2811	DGS-SC (R448A, R125, R404A, R32, R507A, R434a, R410A, R452b, R407C, R143b) w/B&L
080Z2812	DGS-PE (Propane) w/B&L
080Z2807	DGS-IR-CO ₂ w/B&L
080Z2808	DGS-IR-CO ₂ 5m w/B&L

Gas/Refrigerant Leak Detector Accessories

080Z2815	Spare Sensor-HFC gr 1
080Z2816	Spare Sensor-HFC gr 2
080Z2817	Spare Sensor-HFC gr 3
080Z2818	Spare Sensor-Propane
080Z2813	Spare Sensor-CO ₂
080Z2814	Spare Sensor-CO ₂ 5m
080Z2820	Hand Held Service Tool
080Z2819	Strobe & Horn
148H6226	Splash Guard
148H6236	Duct Set
148H6232	Calibration Adaptor for SC2
148H6238	Remote Kit

Refrigerant Leak Detectors - Infrared

23-2500GL	250 ohm .05% Resistor 1/2 Watt (4 – 20 mA applications)
080Z2151	IR Leak Detector: 8 zone HGM-400 (Display and Detector) includes EOL and charcoal filters
080Z2153	IR Leak Detector: 16 zone HGM-400 (Display and Detector) includes EOL and charcoal filters
080Z2195	Air Sample Line Coupler - 3015-5762
080Z2196	2 Way Splitter Kit-Model 3015-5404
080Z2154	Connection kit to AK-SM 800, includes manual, 4 – 20 mA option board, and 2 resistors. For HGM-MZ only.
C01680417	Leak Detector Charcoal Filter for HGM-300 -- For Replacement
C01703200	Tubing - Polyethylene - Black / White ** Only available in 250' rolls***
C01680421	Bacharach Leak Detector End of Line Filter

Pressure Sensors

060G3990	AKS 32 Pressure Transducer 0-200 PSIG 8 Meter Wire (For Danfoss) 1/8" NPT
060G3991	AKS 32 Pressure Transducer 0-500 PSIG 8 Meter Wire (For Danfoss) 1/8" NPT
060G1889	AKS32 0-100 PSI Transducers 8M Cable - Use with ECI Systems 1/8" NPT
060G1890	AKS32 0-500 PSI Transducers 8M Cable - Use with ECI Systems 1/8" NPT
060G2101	AKS 33 Pressure Transmitter (4 – 20 mA Output - Use with EKC 316)
060G1037	AKS 32R Pres. Trans. -1 to 12 bar - Ratiometric output 1/4 " NPT (for AK-CC, AK-PC controllers)
060G6342	Sensor AKS 2050, -1 to 59 bar, CO ₂ , 1/4" NPT
060G6344	Sensor AKS 2050, -1 to 159 bar, CO ₂ , 1/4" NPT
060G000812	Din Plug for AKS 32R Transducer
060G1034	Plug Connector with 5m cable for AKS 32R

Temperature Sensors

084N2032	AKS 21W Boiler Temp Probe (fits well with 1/2 NPT)
084N0027	AKS 11 Temp Sensor - 11.5 ft. Cable General Purpose Sensor
084N0028	AKS 11 Temp Sensor - 18 ft. Cable General Purpose Sensor
084N0029	AKS 11 Temp Sensor - 27.5 ft. Cable General Purpose Sensor
084N0036	AKS 12 Temp Sensor - 5 ft. Rounded probe, Air Temp Sensor
084N0038	AKS 12 Temp Sensor - 18 ft. Rounded probe, Air Temp Sensor

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084N2003	AKS 21 Temp Sensor - High Temp (used for high temp pipe applications) 2.5M Cable
084N2008	AKS 21 Temp Sensor - High Temp (used for high temp pipe applications) 5M Cable
084N3016	MBT 153 Temp Sensor - 18 FT. Cable General Purpose Sensor - Com-Trol and ECI TP-2L replacement
080Z2186	Air Supply / Duct Probe (OLD ASTP2)
080Z2185	Box Temperature Probe Assembly (probe length: 18")
084N1007	Product temperature sensor - calibration certificate included
080Z2187	Zone Temperature Sensor (Temp sensor on cover plate - for HVAC room temperature) (OLD ZTP2)
AKCOTC	Condenser Air probe
CTPKIT	Com-Trol and CPC Temp. Sensor Resistor Kit (2 per pkg)
TP1KIT	AK-2 Pullup kit for ECI TP-1 Probe (4 resistors per kit)
097U0063	AKS 11-Blue Cable 8.5m (S1-Coil in)
097U0064	AKS 11-Red Cable 8.5m (S2-Coil Out)
097U0065	AKS 11-Purple Cable 8.5m (S3-Return Air)
097U0066	AKS 11-Green Cable 8.5m (S4-Discharge Air)
097U0067	AKS 11-Orange Cable 8.5m (S5-Defrost Term)

Humidity Sensors and Light Level Sensors

AKCOTHP	Outdoor Photo Cell / Humidity Sensor / Temp Sensor (mounted in outside enclosure)
080Z2167	Outdoor Humidity sensor only (will mount in 1/2" conduit knock out) (replaces EMHS-4)
080Z2171	Humidity sensor w/Indoor Temp. Sensor (old Part Number EMHS3-1)
080Z2172	Outdoor Photo Cell With Temp Sensor (old Photo-OD-1)
080Z2177	Photocell - Indoor (old Photo-ID)
080Z2169	Skylight Photocell 0-5000 FC with Resistor (for new applications) (old Photo-MAS)

Air Flow, Building Pressure, Door Monitors, Current Transformers

CAFS-1	Air Flow Switch
DRMON-1	TS Door Monitor Assembly
LDCO ₂	CO ₂ Gas Sensor
080Z2251	Current Transformer 0 – 50/100/200 A (connects to 255 for compressor current monitoring) (replaces CT-14)

Misc. Relays and Transformers

41-062	24 V Coil 2 Pole Form C Relay
49-100	Current Sensing Relay
55-168	150 VA Wall Mount Control Transformer - 24 V
68-102	5 V DC Din Rail Mounted Power Supply

Alarm Devices

AKAHS01	24 V Horn/Strobe Red Indoor
AKAHS02	24 V Horn/Strobe Blue Outdoor
99-242	Strobe Alarm light - Amber
99-272	Strobe Alarm light - Blue

AK2 Case/Rack Controllers

080Z0130	AK-CC 750 Multievap Controller-up to 4 EEV or LLSV (LON TP78)
080Z0139	AK-CC 750 Multievap Controller-up to 4 EEV or LLSV (LON RS485)
080Z0140	AK-CC 750A (Replaces 080Z0125)
080G0289	AK-PC 351
080G0281	AK-PC 551-115/230V
080G0283	AK-PC 551-24V
080G0320	AK-PC 572
080G0312	AK-PC 651
080Z0192	AK-PC 782A (Full Booster Controller + Ejector)
080Z0202	AK-PC 782B
080Z0191	AK-PC 781A, Pack Controller

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080Z0193	AK-PC 783A Cascade Pack Controller (Up to 4x4)
080Z0201	AK-PC 772A Transcritical CO2 Rack Controller (Up to 3x2)
080Z2157	AK-CC750 120V EEV Custom I/O Panel (includes 24vdc power supply)
080Z2161	AK-CC 750 Custom I/O Panel (includes 24vdc power sply, 24vac transformer for EEV power)
084B8534	AK-CC 210 115V (10 output configurations)
084B8520	AK-CC 210 220V (10 output configurations)
084B4081	AK-CC 55 Compact Controller
084B4181	AK-CC 55 Compact Controller-I Pack (12) *No Connectors*
084B4082	AK-CC 55 Single Coil Controller
084B4182	AK-CC 55 Single Coil Controller-I Pack (12) *No Connectors*
084B4083	AK-CC 55 Single Coil UI
084B4183	AK-CC 55 Single Coil UI-I Pack (12) *No Connectors*
084B4084	AK-CC 55 Multi-Coil Controller
084B4184	AK-CC 55 Multi-Coil Controller-I Pack (12) *No Connectors*
084B4057	AK-CC 55 Single Coil UI (locked software-v1.53)
084B4157	AK-CC 55 Single Coil UI (locked software-v1.53)-I Pack

AK2 Case/Rack Controllers - Accessories

084B8565	EKA 179 LON RS485 card, For AK-CC 210
084B8579	EKA 175 LON RS485 card. For AK-CC 550A
084B8564	EKA 178 Modbus Module (only supported by AK-CC 210)
084B8562	EKA 163A Display (For EKC 202C and Higher) - Red Display Screw terminals, no buttons
084B8563	EKA 164A, Display, Universal settings (with Screw Terminals and Buttons)
084B8574	EKA 163B, Display (used with AK-CC 550 and AK-CC 750 controllers) Plug connection, no buttons
084B8575	EKA 164B,Display, Remote setting (used with AK-CC 550 and AK-CC 750 controllers) Plug connection and buttons
084B7299	Cable 6m, EKA displays, S/M-Pack (used with 084B8574 and 084B8575)
084B7298	Cable 2m, EKA displays, S/M-Pack (used with 084B8574 and 084B8575)
084B8567	EKA 182A Copy Key - for AK-CC 210
084B8582	EKA 183A Programming Key - for AK-CC 210, 450, 550, 550A, ERC 211,213,214
60-274	Metal EKC Bracket For EKC 200 series, ERC, and AK-CC 210
080Z0251	AK-OB 110, Accessory, 2 Analog outputs, (used with AK-CC 750, AK-PC 781 and AK-PC 783 controllers)
084B4075	AK-UI55 Bluetooth Display
084B4175	AK-UI55 Bluetooth Display-I Pack (24)
084B4076	AK-UI55 Set Display
084B4194	AK-UI55 Set Display-I Pack (24)
084B4077	AK-UI55 Info Display
084B4195	AK-UI55 Info Display-I Pack (24)
084B4099	AK-UI55 Mounting Base
084B4070	AK-OB55 Lon Comm Module
084B4192	AK-OB55 Lon Comm Module-I Pack (36)
084B4189	Connectors bag-Compact (48)
084B4190	Connectors bag-Single Coil (48)
084B4191	Connectors bag-Multi Coil (36)
084B4078	UI 3M cable
084B4196	UI 3M cable-I Pack (24)
084B4079	UI 6M cable
084B4198	UI 6M cable-I Pack (24)

EKC (EKA) Local Display - Communicates to AK2-255

084B8693	EKC 202D2 Stand Alone Display Unit 110V (Green Display) & LON 485 communication card
084B8670	EKA Remote Display (Green Display)
084B8584	EKA Mounting Flange Kit

EKC/EKD series controllers	
084B7124	EKA 174, LON-card, RS485, used with EKC316
EKE Controllers	
080G5300	EKE 1A
080G5350	EKE 1B
080G5400	EKE 1C
080G5050	EKE 100 1 V IP00
080G5051	EKE 100 1 V IP20
080G5052	EKE 100 1 V IP20 (w/display)
080G5055	EKE 100 2 V IP00
080G5056	EKE 100 2V IP20
080G5057	EKE 100 2 V IP20 (w/display)
EKE Accessories	
080G0294	MMIGRS2 Display (Single Pack)
080G0295	MMIGRS2 Display (I-Pack)
080G0075	ACCCBI Cable, 1.5 m
080G0076	ACCCBI Cable, 3 m
MCX Controllers	
080G0285	MCX-RTU Rooftop Controller App (RTU App must be field loaded)
080G0307	MCX08M2 optional IO Expansion
080G0294	MMIGRS2 Remote Display
193G3232	eXor Gateway
193G3244	eXor Gateway comm module
KW Transducers and CTS	
CTB0800	Split Core Buss Bar Style CT W3.5 x L3.5 800A Wattnode CT
CTB1200	Split Core Buss Bar Style CT W3.5 x L3.5 1200A Wattnode CT
CTB2000	Split Core Buss Bar Style CT W3.5 x L3.5 2000A Wattnode CT
WATTNODEP1	WATTNODE PLUS 120/208-240V kWh,kW,PF,V,A,KVA Meter - Requires 3 wattnode CTs (Lon Communication)
080Z2144	Wattnode Modbus Meter-208 V. Requires 3 wattnode CTs
080Z2146	Wattnode Modbus Meter-400 V. Requires 3 wattnode CTs
080Z2129	Wattnode Modbus Meter (SM800A compatible only)
KVS EEPR Valves	
034G4252	KVS 15 - 5/8" X 5/8" ODF (Requires Motor Connection Cable)
034G2858	KVS 42 - 7/8" X 7/8" ODF (Requires Motor Connection Cable)
034G2850	KVS 42 - 1 1/8" x 1 1/8" ODF (Requires Motor Connection Cable)
034G2851	KVS 42 - 1 3/8" x 1 3/8" ODF (Requires Motor Connection Cable)
034G2852	KVS 42 - 1 5/8" x 1 5/8" ODF (Requires Motor Connection Cable)
084B2238	KVS Filter (Need 1 per valve over 10 m of wire)
034G0013	Manual Actuator Box
ETS Electronic Expansion Valves	
034G4209	ETS 12.5 - 1/2" X 1/2" ODF (Requires Motor Connection Cable)
034G4210	ETS 12.5 - 5/8" X 5/8" ODF (Requires Motor Connection Cable)
034G4211	ETS 12.5 - 7/8" X 7/8" ODF (Requires Motor Connection Cable)
034G4202	ETS 25 - 5/8" X 5/8" ODF (Requires Motor Connection Cable)
034G4203	ETS 25 - 7/8" X 7/8" ODF (Requires Motor Connection Cable)
034G1706	ETS 50B - 1 1/8" X 1 1/8" ODF
034G0508	ETS 100B - 1 3/8" X 1 3/8" ODF
034G7078	M12 female straight conn. Cable 12 m Single

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034G2323	Motor Connection Cable. M12 female 8 m length
034G2200	M12 female straight conn. cable 8 m Single
034G2330	Motor Connection Cable. M12 female 2 m length
034G2201	M12 female straight conn. cable 2 m Single
034G7073	M12 female Rt-angle conn cable 2 m 40-pc M-Pack
034G7074	M12 female Rt-angle conn cable 8 m 40-pc M-Pack

CO₂ System Valves	
027H7188	CCM 10 - 5/8" x 5/8" ODF (Requires Motor Connection Cable)
027H7187	CCM 20 - 7/8" x 7/8" ODF (Requires Motor Connection Cable)
027H7186	CCM 30 - 1 1/8" x 1 1/8" ODF (Requires Motor Connection Cable)
027H7185	CCM 40 - 1 1/8" x 1 1/8" ODF (Requires Motor Connection Cable)
027H7200	CCMT 2 - 5/8" x 5/8" ODF (Requires Motor Connection Cable)
027H7201	CCMT 4 - 5/8" x 5/8" ODF (Requires Motor Connection Cable)
027H7202	CCMT 8 - 5/8" x 5/8" ODF (Requires Motor Connection Cable)
027H7231	CCMT 16 - 1 1/8" x 1 1/8" ODF (Requires Motor Connection Cable)
027H7232	CCMT 24 - 1 1/8" x 1 1/8" ODF (Requires Motor Connection Cable)
027H7233	CCMT 30 - 1 1/8" x 1 1/8" ODF (Requires Motor Connection Cable)
027H7234	CCMT 42 - 1 1/8" x 1 1/8" ODF (Requires Motor Connection Cable)

AKV-10 Electronic Expansion Valves	
018F4115	Coil, 110 V Conduit hub
018F4110	Coil, 110 V Junction box
018F4104	Coil, 24 V Conduit hub
018F4100	Coil, 24 V Junction box
018F4122	Coil, 208 – 240 V Conduit hub
018F4120	Coil, 208 – 240 V Junction box
018F4131	Coil, 120 V Conduit hub (High MOPD-CO2)
018F4130	Coil, 120 V Junction box (High MOPD-CO2)
018F4132	Coil, 208 V Junction box (High MOPD-CO2)
018F4180	Coil, dual voltage Conduit hub (for EVR v2)
018F4181	Coil, dual voltage Junction box (for EVR v2)
068F5211	AKV 10P1 Valve ODF-ODF 3/8 – 1/2 inch MU.18
068F5212	AKV 10P2 Valve ODF-ODF 3/8 – 1/2 inch MU.18
068F5213	AKV 10P3 Valve ODF-ODF 3/8 – 1/2 inch MU.18
068F5214	AKV 10P4 Valve ODF-ODF 3/8 – 1/2 inch MU.18
068F5215	AKV 10P5 Valve ODF-ODF 3/8 – 1/2 inch MU.18
068F5216	AKV 10P6 Valve ODF-ODF 3/8 – 1/2 inch MU.18
068F5217	AKV 10P7 Valve ODF-ODF 1/2 – 5/8 inch MU.18
068F5231	AKV 10P1 Valve ODF-ODF 3/8 – 1/2 inch, I-pack16
068F5232	AKV 10P2 Valve ODF-ODF 3/8 – 1/2 inch, I-pack16
068F5233	AKV 10P3 Valve ODF-ODF 3/8 – 1/2 inch, I-pack16
068F5234	AKV 10P4 Valve ODF-ODF 3/8 – 1/2 inch, I-pack16
068F5235	AKV 10P5 Valve ODF-ODF 3/8 – 1/2 inch, I-pack16
068F5236	AKV 10P6 Valve ODF-ODF 3/8 – 1/2 inch, I-pack16
068F4044	AKV 10PS4 VALVE ODF-ODF 3/8 – 1/2 inch MU18
068F4045	AKV 10PS5 VALVE ODF-ODF 3/8 – 1/2 inch MU18
068F4046	AKV 10PS6 VALVE ODF-ODF 3/8 – 1/2 inch MU18
068F4047	AKV 10PS7 VALVE ODF-ODF 1/2 – 5/8 inch MU18
068F5184	AKV 10PS4 VALVE ODF-ODF 3/8 – 1/2 inch, I-pack16
068F5185	AKV 10PS5 VALVE ODF-ODF 3/8 – 1/2 inch, I-pack16

068F5186	AKV 10PS6 VALVE ODF-ODF 3/8– 1/2 inch, I-pack16
068F5151	AKV 10P0-P3 Orifice Kit (Orifices, O-Ring, Strainer)
068F5152	AKV 10P4-P7 Orifice Kit (Orifices, O-Ring, Strainer)
068F5153	AKV 10P Armature Kit
068F5154	AKV 10P Filter Kit
068F5155	AKV 10PS4-PS8 Orifice Kit
068F5156	AKV 10PS4-PS8 Filter Kit
068F5161	AKV 10PS4-PS8 Armature Kit

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