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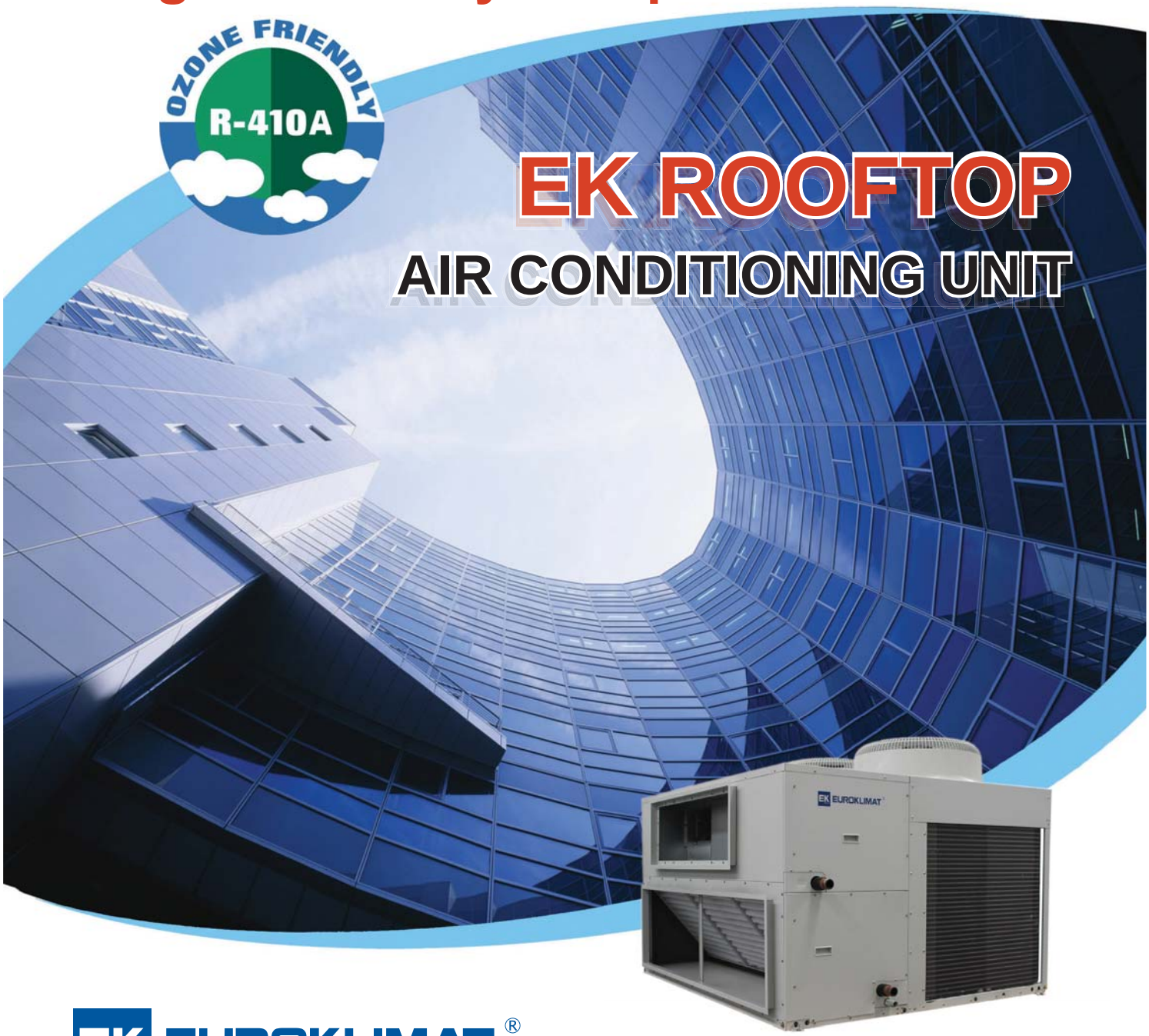
Cooling System Solutions

www.tahviehsam.com

High Efficiency Compact



EK EUROKLIMAT ®
SINCE 1963

Give life to building, bring us back to nature

EK Rooftop Air conditioning unit

www.euroklimat.com

EUROKLIMAT Air Conditioner, Environmental & Energy-saving Technology from Europe.

EUROKLIMAT (EK) was established in 1963 in Italy. For the past half a century, it has become famous as an energy-saving air-conditioning manufacturer in Italy and globally. Continuous innovation, new product development and top manufacturing quality are the driving force behind this growth.

EUROKLIMAT (EK) pursues the ideals of protecting the environment, providing physical comfort and adopting energy-saving into the whole process of product R&D, manufacturing and service. Our products covering residential, commercial and close control air-conditioner are manufactured according to the global generally accepted standards.

Berlin - Allianz Assurance

ISO9001: 2008 corporate certification

ISO14001: 2004 Environmental management system certification

Product Manufacturing License (XK06-015-00361)

CNAS L5123

State-certified Lab

BMW Central Data Center, Munich

Helsinki- Nokia R&D centers worldwide headquarters

EK Italia Headquarters

3M Central office, UK

DHL Central Data Center

ZTE Central Office, Shenzen

EK China Factory

EK China Factory

Apple Central Shopping, Shanghai

Canon Factory

Renault Automotive Factory

Coca Cola Factory

EK EUROKLIMAT®

Product Overview

After 50 years of development and continuous innovation, EK air-cooled unit provides superior quality and has become the leader of the air-cooled heat pump technology in the world. Deriving from the design essence of Italy, "air-cooled kingdom", EK roof air-conditioning unit introduces design results of EK's Europe leading large air-cooled unit, uses efficient scroll compressors and international well-known spare parts and optimizes system matching, thereby providing high stability and reliability. In addition, EK has established a large 1800 kW national air-cooled performance laboratory to perform strict test on the units and control quality.

EK roof air-conditioning unit is a large or medium air-conditioner integrating air supply, cooling, heating, humidification, dehumidification, air purification and electrical control. The air-conditioning unit is a direct evaporation unit and features high energy efficiency, low noise, high control precision, safety, reliability, low vibration, high anti-corrosive performance, high sealing performance as well as easy installation and nice appearance.

The roof air-conditioning unit series uses air as the cold and heat sources, which saves precious water resources, and is applicable to large factory buildings and workshops that need to control temperature, humidity and cleanliness in the areas where it is inconvenient to install water systems or areas that are short of water resources. In particular, the air-conditioning unit is applicable to most areas confronting with severe water shortage in China and overcomes the disadvantage of frost crack of water systems in winter.

Nomenclature

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
E	K	R	T	2	0	0	A	R	1	X	-	H	2	0	F	A	A	E	

EKRT 200 A R 1 X - H 20 F AA E

- MODEL
- SIZE
- DESIGN SERIES
- CONFIGURATION
- REFRIGERANT
- IDENTIFICATION
- EXPORT
- DESCRIPTION OF PRODUCTS
- POWER SUPPLY
- ESP
- AIR FLOW

MODEL -- EKRT: Rooftop air conditioning unit
Identification -- X: Full fresh air unit
Size -- 150,200,250,300,360,420
Design Series -- A Series
Configuration -- R: Heat pump; W: Cooling only+Hot water coil
LC: Low ambient temperature cooling
Refrigerant -- 1: R410A
Air Flow -- H:Horizontal U: Downflow
Power supply -- F: 380-415V/3N~/50Hz

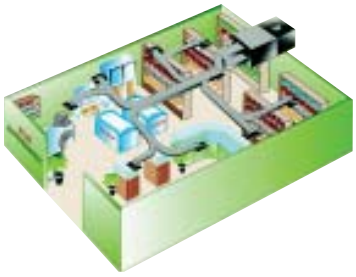
Features

Anti-corrosive, rust-proof and adaptable

- EKRT roof air-conditioning unit needs to be installed on the open roof. Therefore, higher anti-corrosive and waterproof requirements are raised for the unit. The shell of roof air-conditioning unit is made of electro-galvanized steel that goes through electrostatic anti-corrosive coating and therefore can adapt to various outdoor climatic environments.

Efficient, energy-saving, safe and reliable

- EKRT roof air-conditioning unit uses an efficient scroll compressor, featuring high energy efficiency ratio and high reliability.
- EKRT air-conditioning unit is designed in an overall structure and is totally completed in the plant, which avoids outstanding issues such as poor copper pipe welding on site and filling of unclean refrigerant on site and improves the system reliability and energy-saving effect.



Intelligent control and simple operation

- EKRT roof air-conditioning unit series is equipped with intelligent controllers, which facilitates operation management.
- The main unit is integrated with the electrical part in terms of design. You just need to connect the unit to the power supply, which saves complex electrical connection engineering.

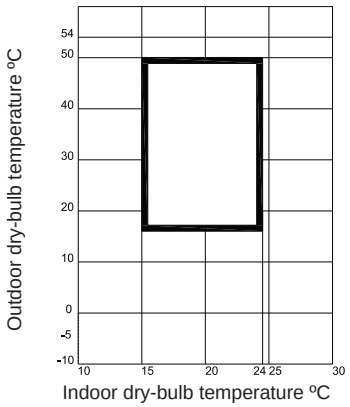
Flexible installation and space-saving

During design, EKRT roof air-conditioning unit takes users' installation requirements into full consideration. Therefore, it adopts a compact overall structure. The base evenly bears the weight of the compressor, heat exchange coil, blower and connecting pipes. After fixing the integrated unit on the roof, you can complete installation of the air-conditioning unit.

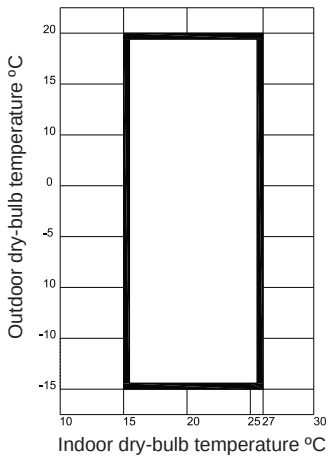
- EKRT roof air-conditioning unit is equipped with two interfaces for connecting air pipes in the horizontal direction and in the vertical direction. You can flexibly select one interface according to field installation conditions.
- EKRT air-conditioning unit is installed on the roof, which facilitates introduction of outdoor fresh air.
- Because the blower uses a V-belt to drive the unit, EKRT air-conditioning unit can adjust the air volume and air pressure as required.
- EKRT air-conditioning unit is directly installed on the roof, without occupying indoor space.

Range of operating temperature

Cooling



Heating



Parameters

Parameters (EKRT150A-EKRT420A R410A refrigerant)

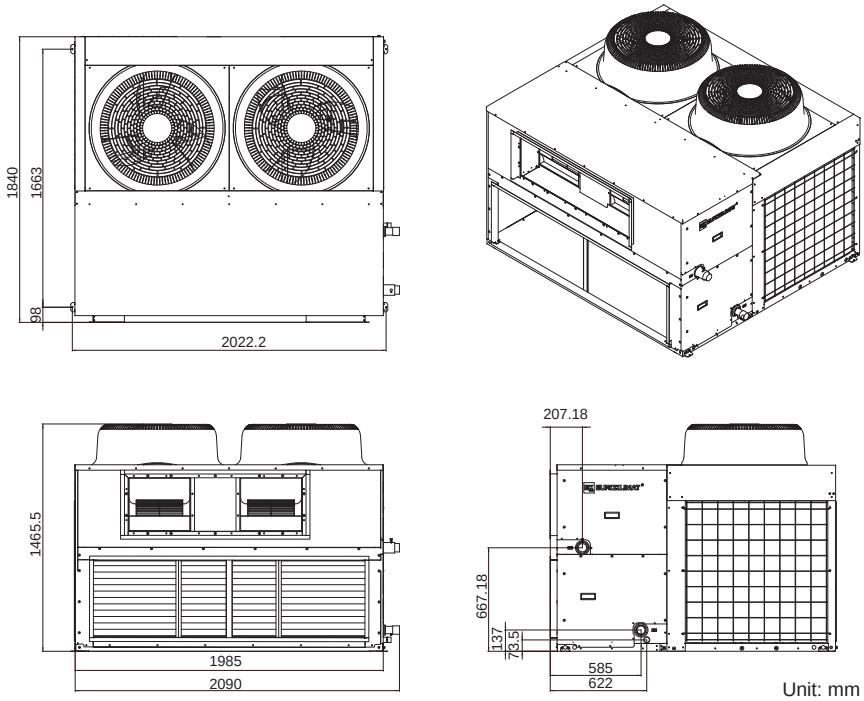
MODEL			EKRT150A	EKRT200A	EKRT250A	EKRT300A	EKRT360A	EKRT420A
NOMINAL CAPACITY		W	43500	57500	72500	87000	96500	118000
NOMINAL TOTAL INPUT POWER		W	16500	21500	27560	34500	38500	46800
NOMINAL RUNNING CURRENT		A	31	41	53	66	74	90
POWER SOURCE		V/Ph/Hz	380~415/3N/50					
REFRIGERANT TYPE / CONTROL			R410A/TXV					
EVAPORATOR	CONTROL	AIR DISCHARGE	DUCTED					
		OPERATION	SLM CONTROLLER					
	AIR FLOW	CMH	9500	11400	13600	16300	18700	21300
	EXTERNAL STATIC PRESSURE	Pa/in.wg.	200/0.79		300/1.18		300/1.18	
	CONDENSATE DRAIN SIZE		R 1		R 1		R 1	
CONDENSER	AIR FLOW	CMH	22000		38000		40000	
	SOUND PRESSURE LEVEL	dB(A)	69	69	74	74	76	76
HOT WATER COIL	COIL	ROWS	2					
	WATER INLET/ OUTLET	SIZE	R 1 1/2					
	HEATING CAPACITY	W	96000	108800	140800	158200	199600	219900
	WATER FLOW	l/s	2.15	2.43	3.15	3.54	4.46	4.92
	WATER PRESSURE DROP	KPa	16	20	8	10	12	15
NOMINAL RUNNING CURRENT		A	31	41	53	66	74	90
DIMENSIONS		L×H×W (mm×mm×mm)	2205×1895×1850	2205×1895×1850	3465×2345×2290	3465×2345×2290	3865×2345×2290	3865×2345×2290
NET WEIGHT		KG	780	800	1450	1480	1600	1600

1) NOMINAL COOLING CAPACITY ARE BASED ON THE CONDITIONS BELOW :
   COOLING: 27°C DB / 19°C WB INDOOR AND 35°C DB OUTDOOR, POWER SUPPLY 380V/3N/50Hz
   HOT WATER COIL HEATING: 21ºC DB INDOOR, WATER INLET 82ºC AND WATER OUTLET 71ºC
2) EFFECTIVE POWER INPUT IS USED IN THE RATED EER/COP CALCULATION, ACCORDING TO ISO STANDARD: ISO 5151 & ISO 13253

Indoor WB (ºC) / Correction Factor (ε) / Outdoor DB (ºC)	17	18	19	20	21	22	23
25	1.036	1.091	1.114	1.135	1.152	1.166	1.177
30	1.000	1.034	1.064	1.091	1.114	1.135	1.152
35	0.921	0.963	1.000	1.034	1.064	1.091	1.114
40	0.826	0.876	0.921	0.963	1.000	1.034	1.064
43	0.760	0.821	0.867	0.913	0.966	0.993	1.028
45	0.691	0.784	0.843	0.875	0.922	0.934	0.989
47	0.612	0.712	0.822	0.805	0.883	0.895	0.945
50	0.562	0.652	0.792	0.752	0.825	0.836	0.895

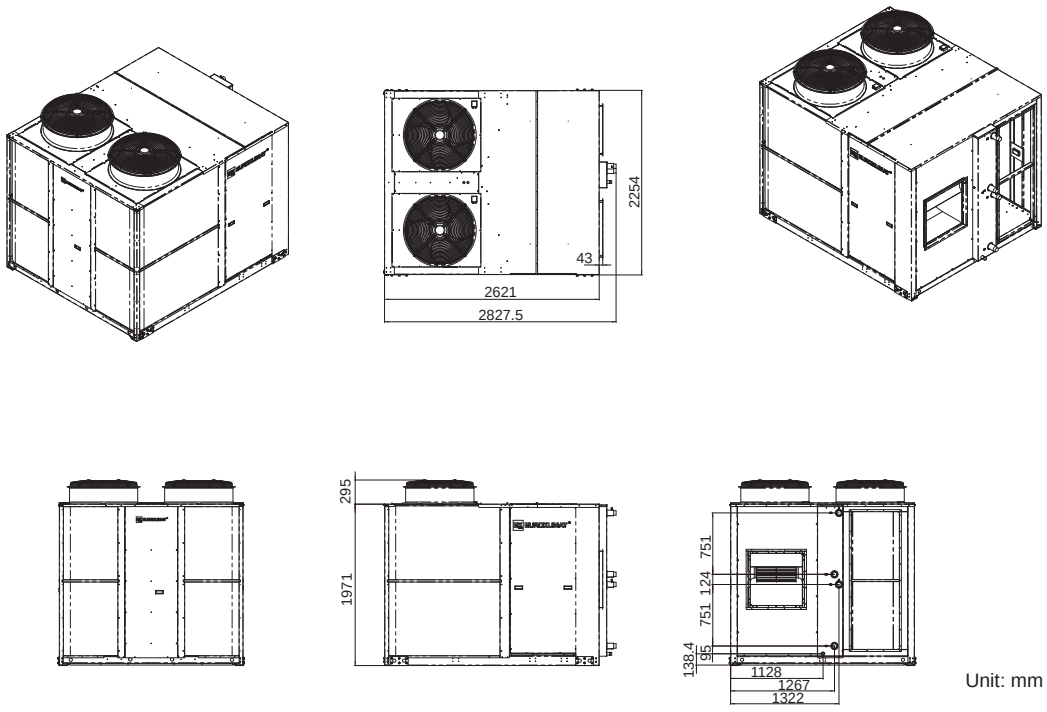
Dimensions

EKRT150/200A



Unit: mm

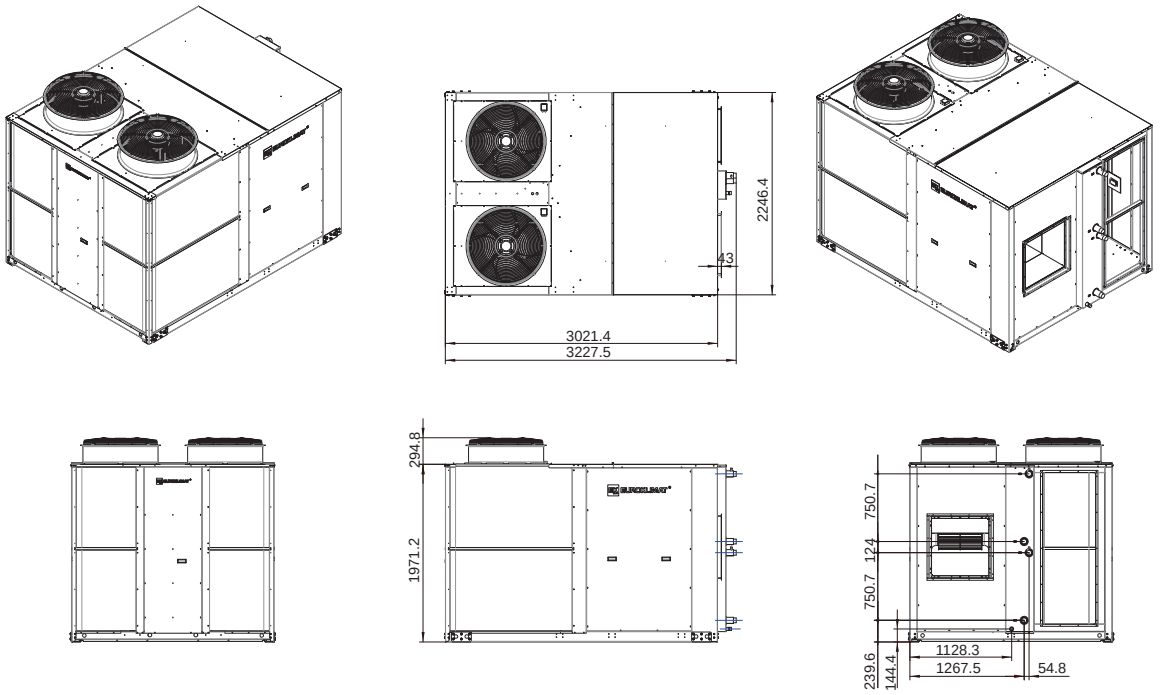
EKRT250/300A



Unit: mm

Dimensions

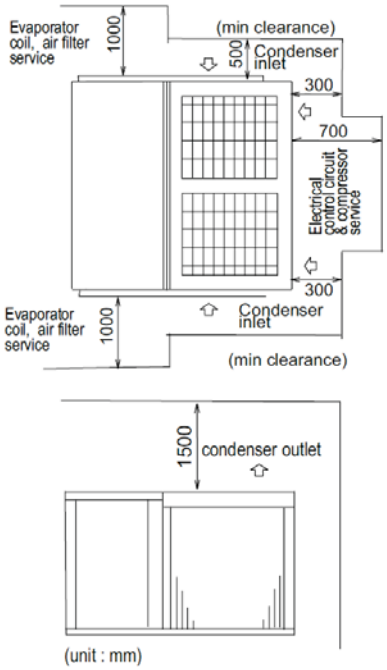
EKRT360/420A

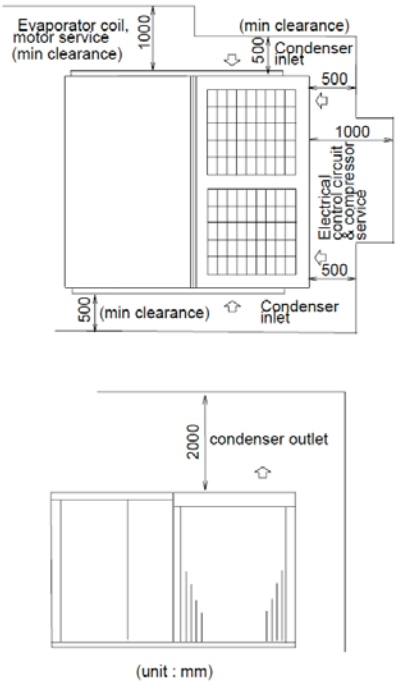


Unit: mm

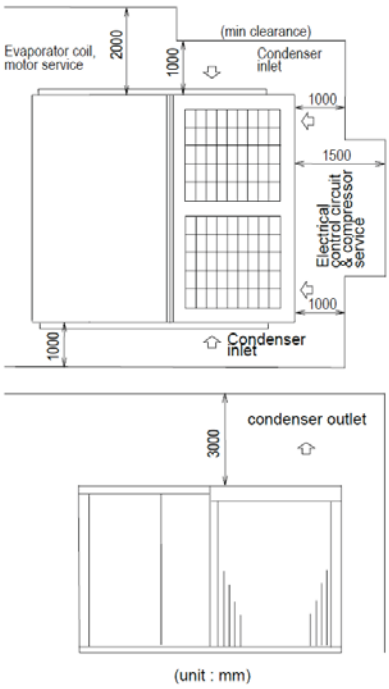
Installation space

EKRT150/200A, EKRT250/300A



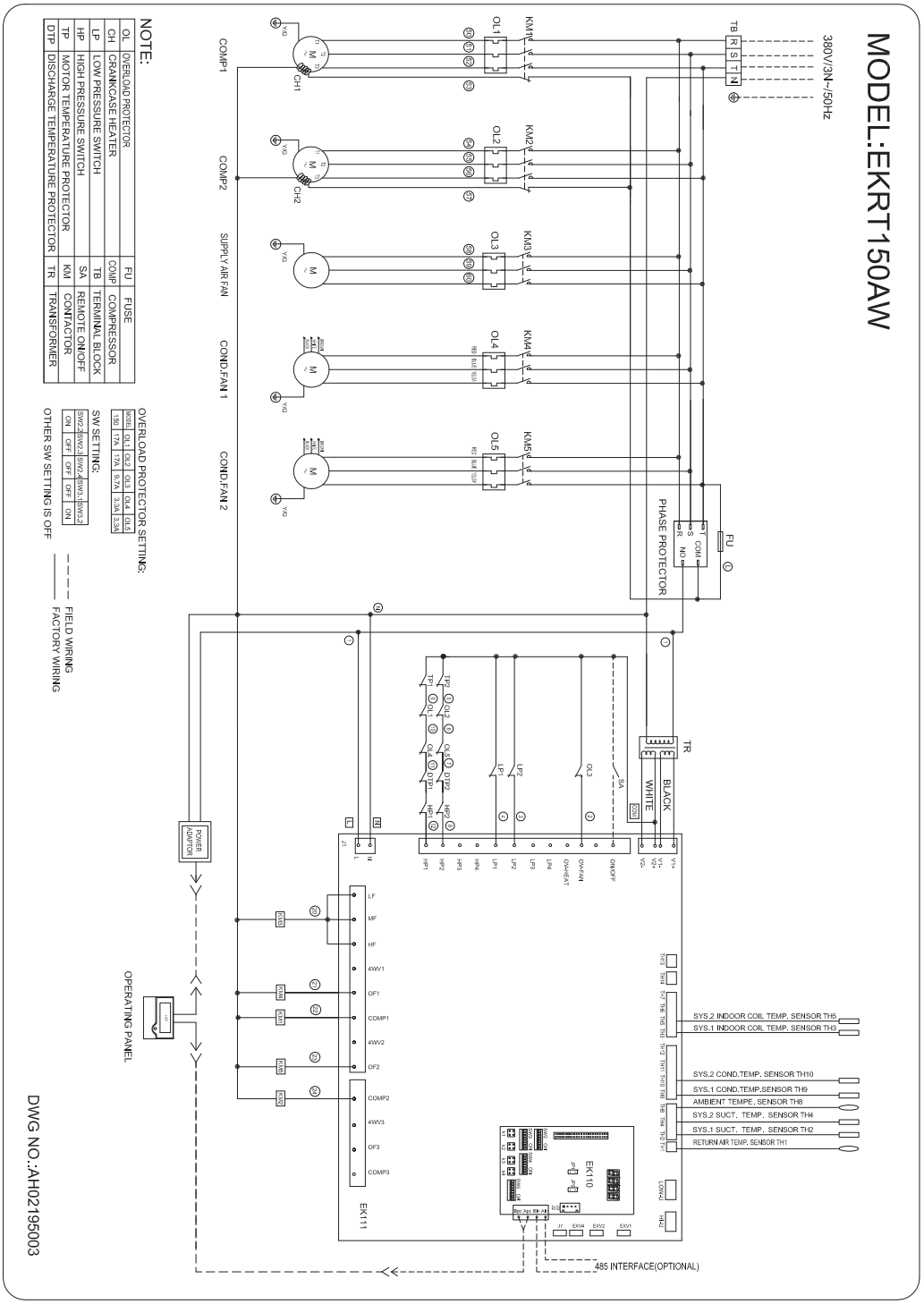


EKRT360/420A



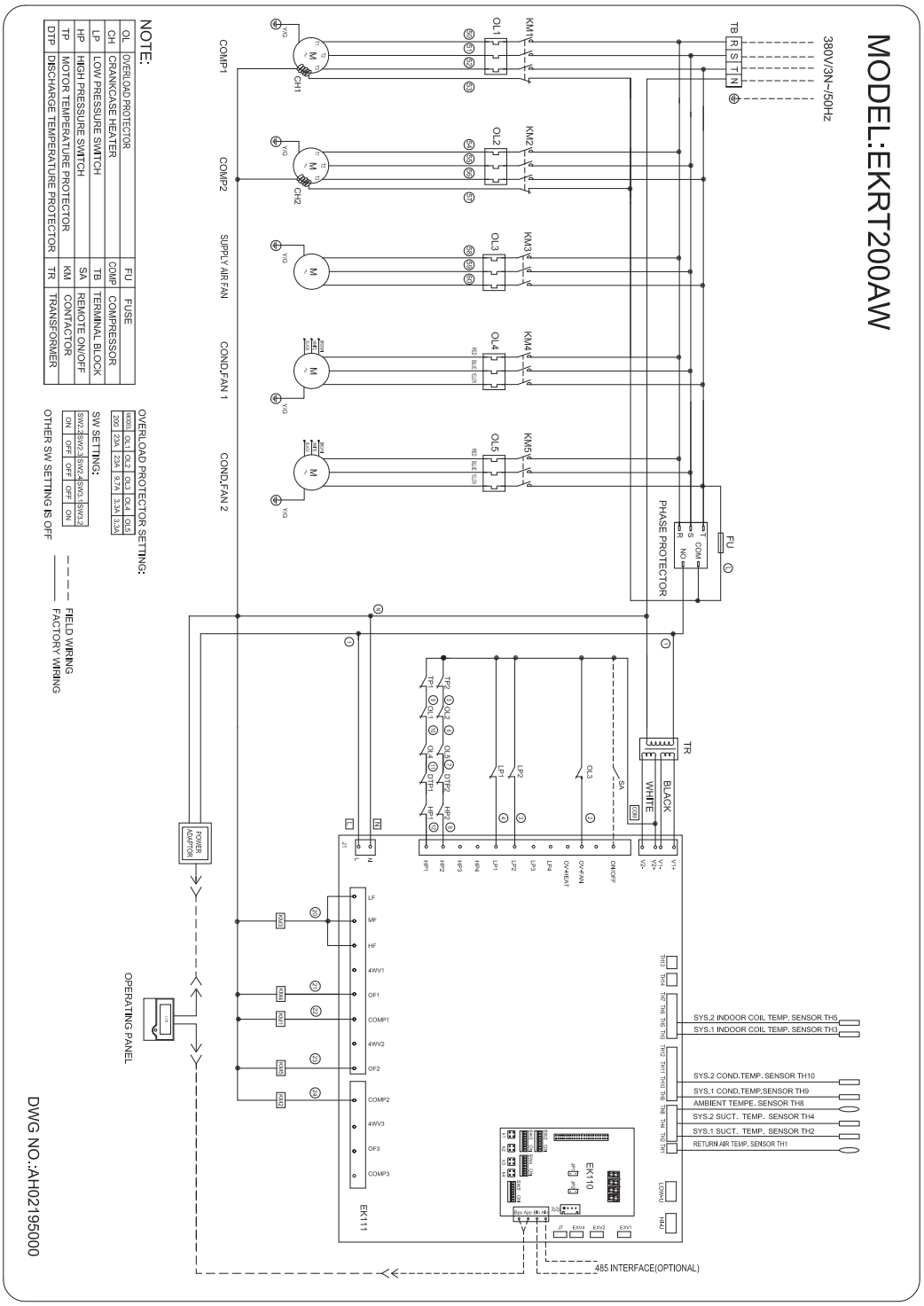
Circuit diagram

MODEL: EKRT150AW



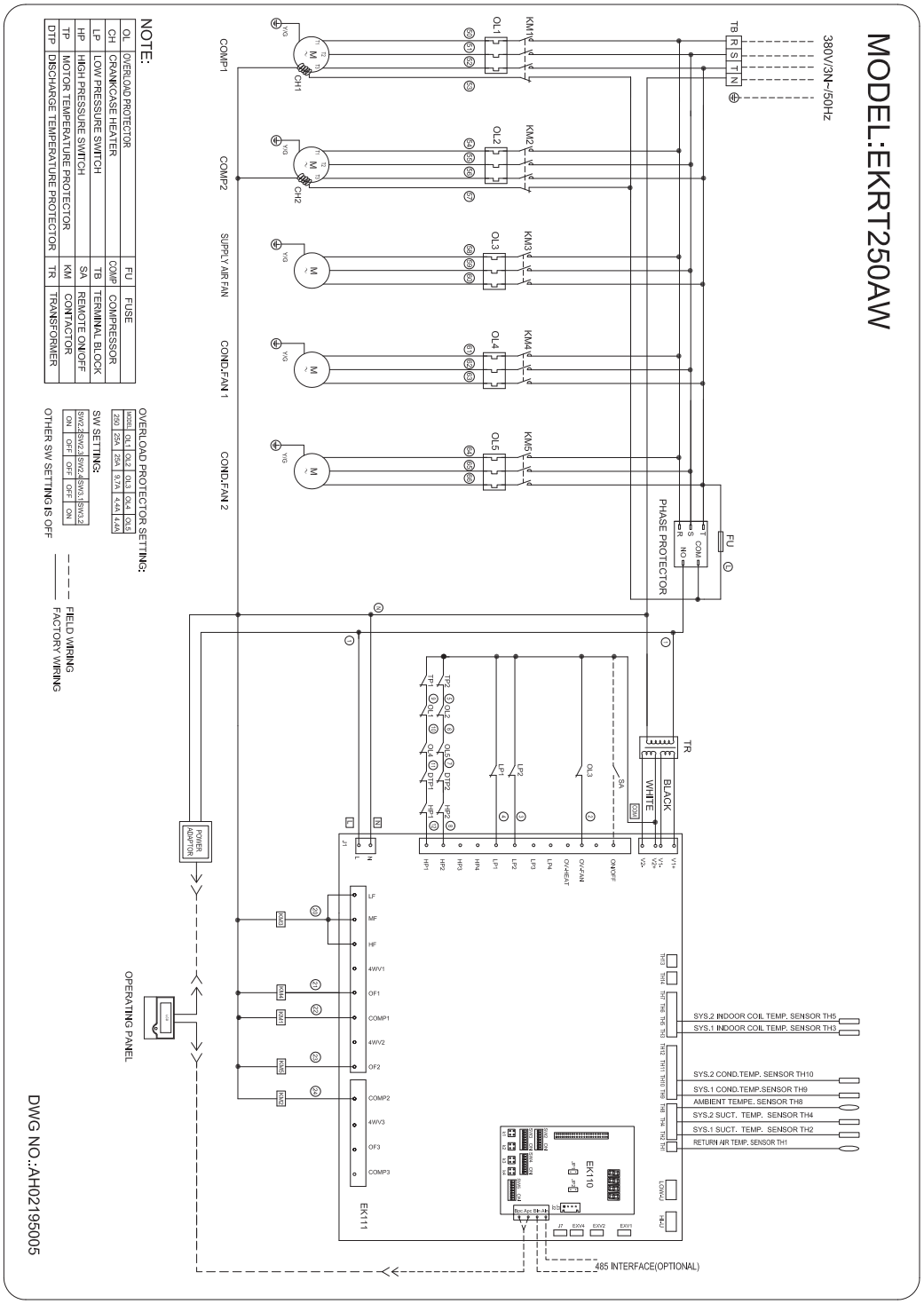
Circuit diagram

MODEL: EKRT200AW



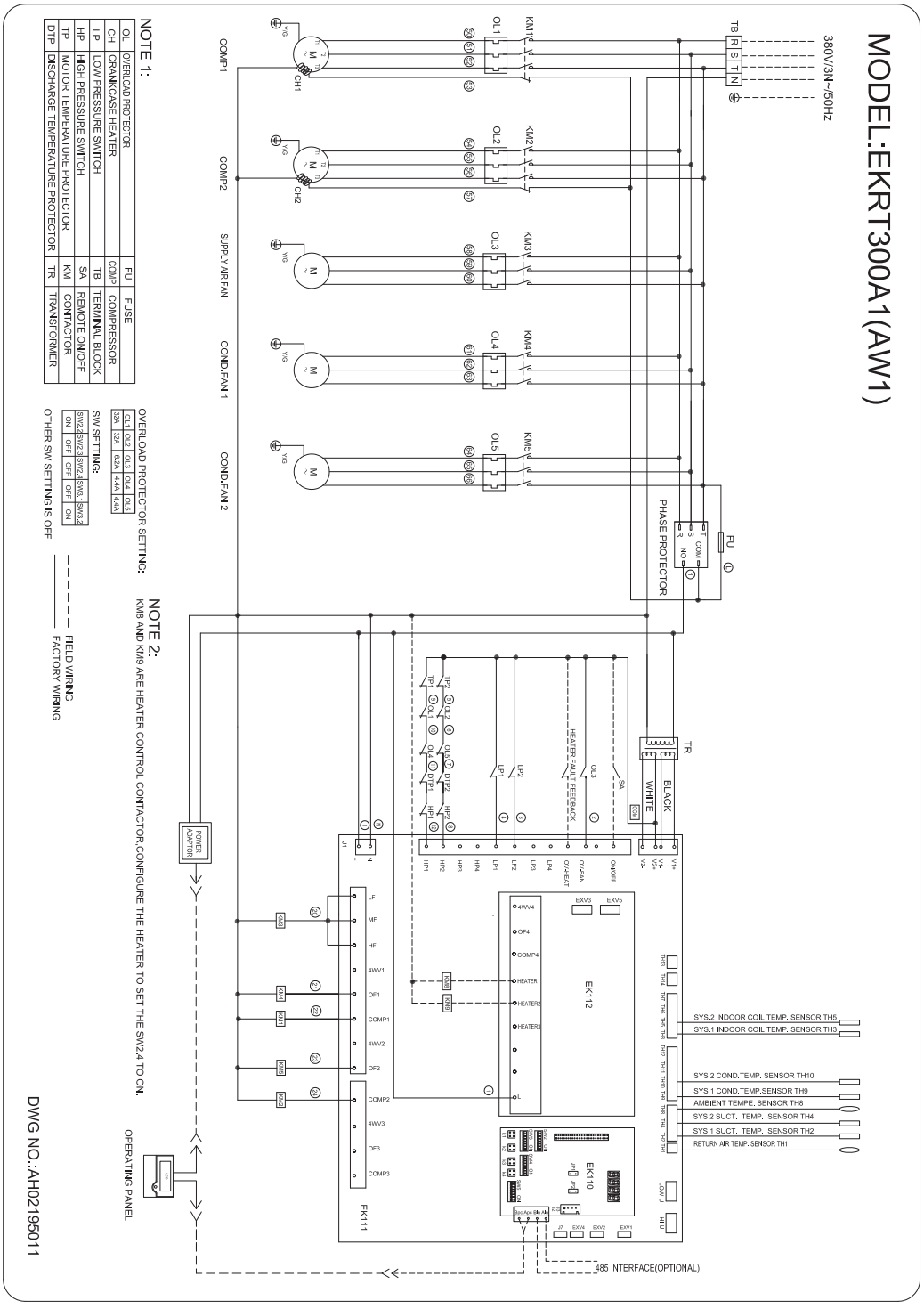
Circuit diagram

MODEL: EKRE250AW



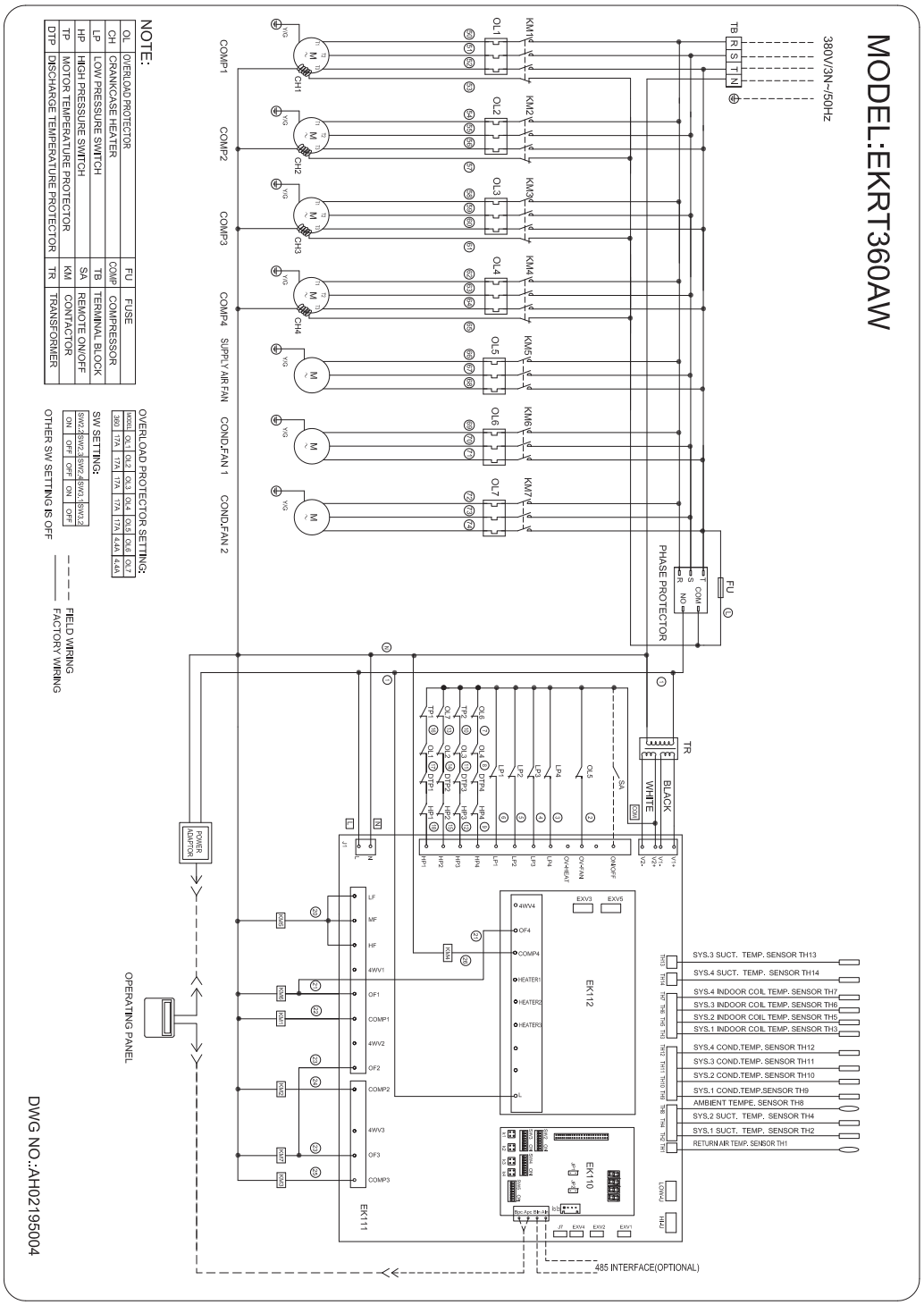
Circuit diagram

MODEL: EKRT300AW



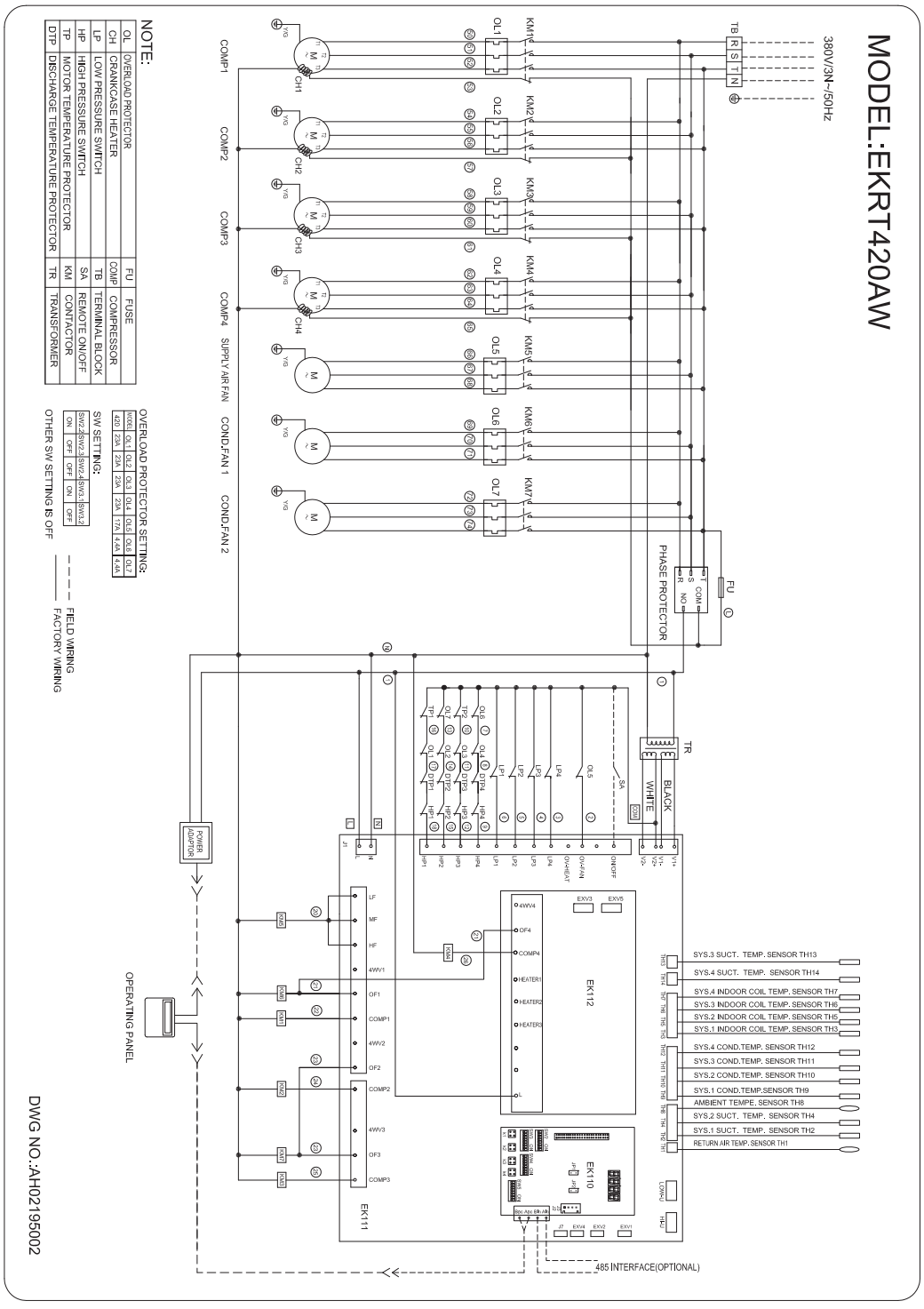
Circuit diagram

MODEL: EKRT360AW



Circuit diagram

MODEL: EKRT420AW



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