

AC/DC converters

KAN-D Family

KAN-D120, 120 W



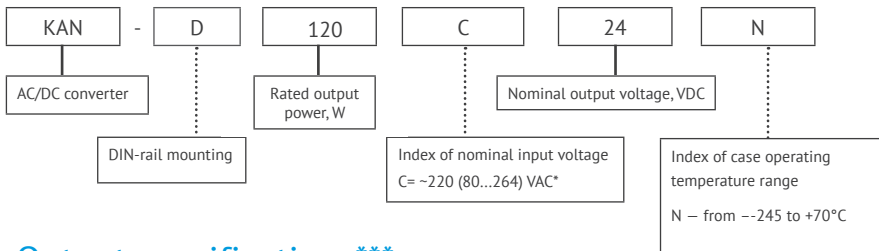
Features

Power	120 W
Output current	ub fa 5 A
Input voltage	~220 (85...264) V
Output voltage	=24 B
Efficiency	no less than 90%
Ambient operating temperature	-25...+70 °C
Dry contact.....	Based on relay
EMC standart	ENC55022 (CISPR22)
Replacement/Installation	Without tools
Installation.....	DIN rail
Dimensions	37×133×131 mm
Warently	2 years

Advantages

- ▶ Parallel and series connection without additional straping
- ▶ Compliance with SIL2 safety level
- ▶ Start from -40 °C is possible.

Ordering information



Output specifications***

Parameter		Value	
Model		KAN-D75C12X	
Output power, W		120 W 150 W at tnom<50 °C and Uin=176...264 V	
Nominal output voltage, VDC		24	
Output voltage adjustment range, MBCB	by built-in trim resistor	±5% 10...14	
	by Adj.U	±5%	
Efficiency, %		91	
Rated output current, A		5	
Ripple and noise (peak-to-peak)		<2%	
Line and load regulation		no more 2%	
Start-up time***, sec		<1 s(Uin=220 VAC)	
Dry contact		Relay contacts dry contact(open state - voltage in nominal range)	
Serviceability output signal	Dry contact	Maximum switchable voltage and current	250 VAC/ 30 VDC/ 1 A
		Relay current consumption, mA	10
		Relay voltage off, V	18...20
	Output "Diag"		open collector 100 mA, 20 V max
Parallel operation****	Capacity increase	without additional strapping	
	Backup mode	with application KAN-MD40	

Input specifications*

Parameter	Value
Input voltage range, VAC	~85...264(=90...372)
Mains frequency range, Hz	47...63 AC
	0 DC
Consumed current, A	1,39 (~120 V) 0,76 (~220 V)
Inrush current pulse	20 A
Input fuse, A	5 A (inert type, internal)
Power factor corrector	Active
Power factor	>0.85

* All specifications are valid for normal climatic conditions Uin. nom., Iout. nom., unless otherwise noted.

*** Adjustment is made by applying voltage 0...5 V on the Reg.U pin (0 V = Uout.nom +4%; 5 V = Uout.nom -4%).

**** With the possibility of starting from -40°

Protections

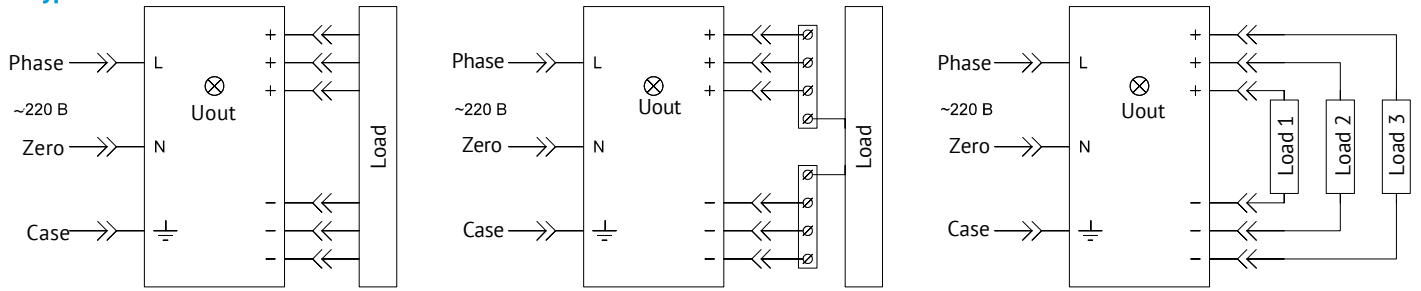
Type of protection	
Short-circuit protection*	auto recovery
Overvoltage protection**, V	<125% Uвых ном

Basic specifications

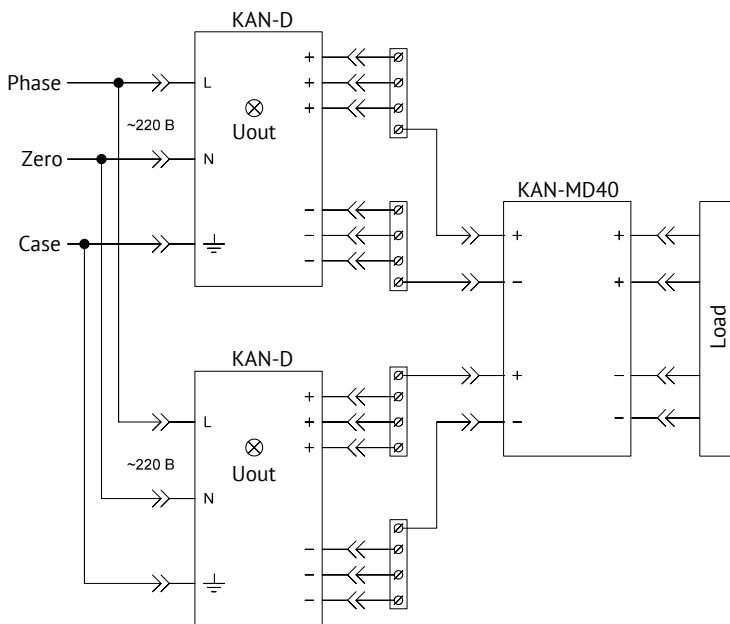
Parameter	Value	
Type of connection	plug-in screw terminals	
Derating	-2% / °C after +60°C	
Degree of protection	IP20	
EMC requirements	EN55022 (CISPR22), Class B	
Ambient temperature, operating , °C	N	-25...+70°C
Ambient temperature, storage, °C	-50...+70°C	
Permissible humidity(operation)	85% at t*(ambient +40 °C (95% at ambient +25 °C)	
Isolation voltage, V	in /case	~3000 VAC
	in /out	~3000 VAC
	out /case, out/out	~1500 VAC
Isolation resistance @ 500 VDC	≥ 20 MOhm min	
Cooling	convective	
MTBF	1400 000 hrs	
Case material	metal	
Dimensions, mm	42x131x134	
Weight, kg	no more 0,9	
Mounting position	Vertical, for horizontal DIN-rail	
Mounting instructions	Indentation between modules should be 5 mm horizontally for non-active modules and 15 mm for active modules. Vertically, there should be a minimum of 50 mm.	
Warranty	2 years	

Wiring diagrams

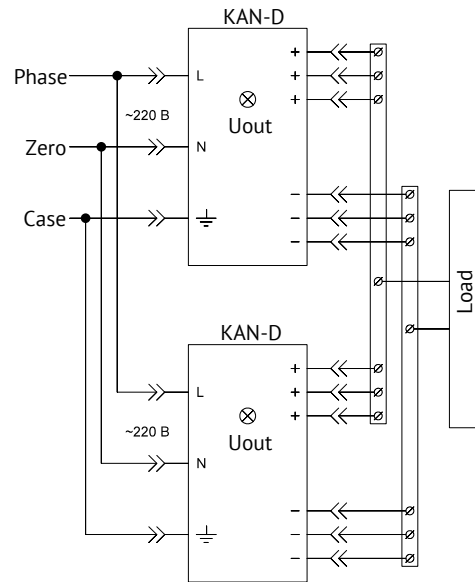
Typical inclusion



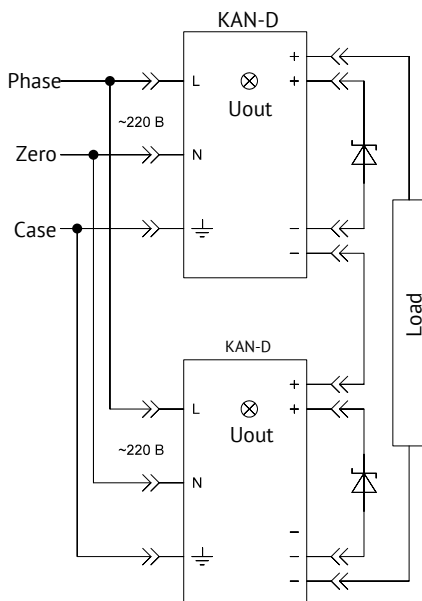
Parallel operation (redundant mode)



Parallel operation (power ramp-up)

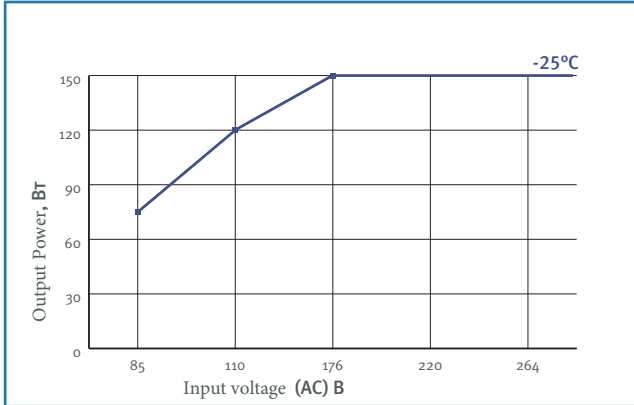


Series connection (max. 2)

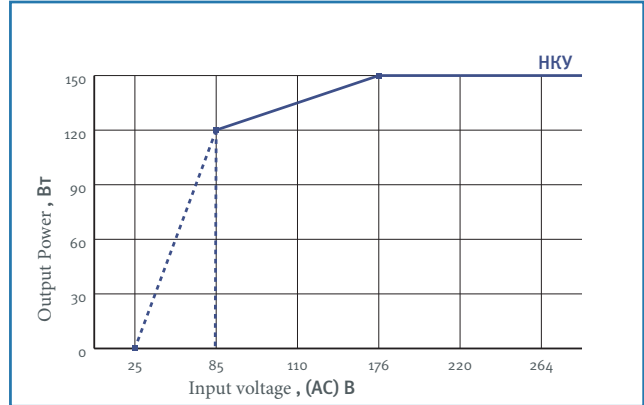


Dereating

Graph of power dependence at startup for -25 °C as a function of input voltage

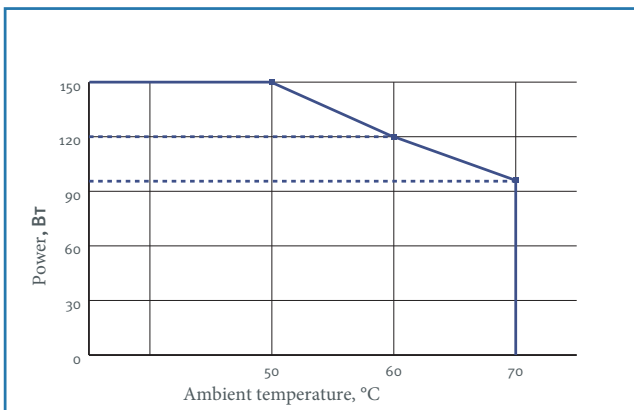


Graph of source power dependence on supply voltage (50 Hz) in normal climatic conditions

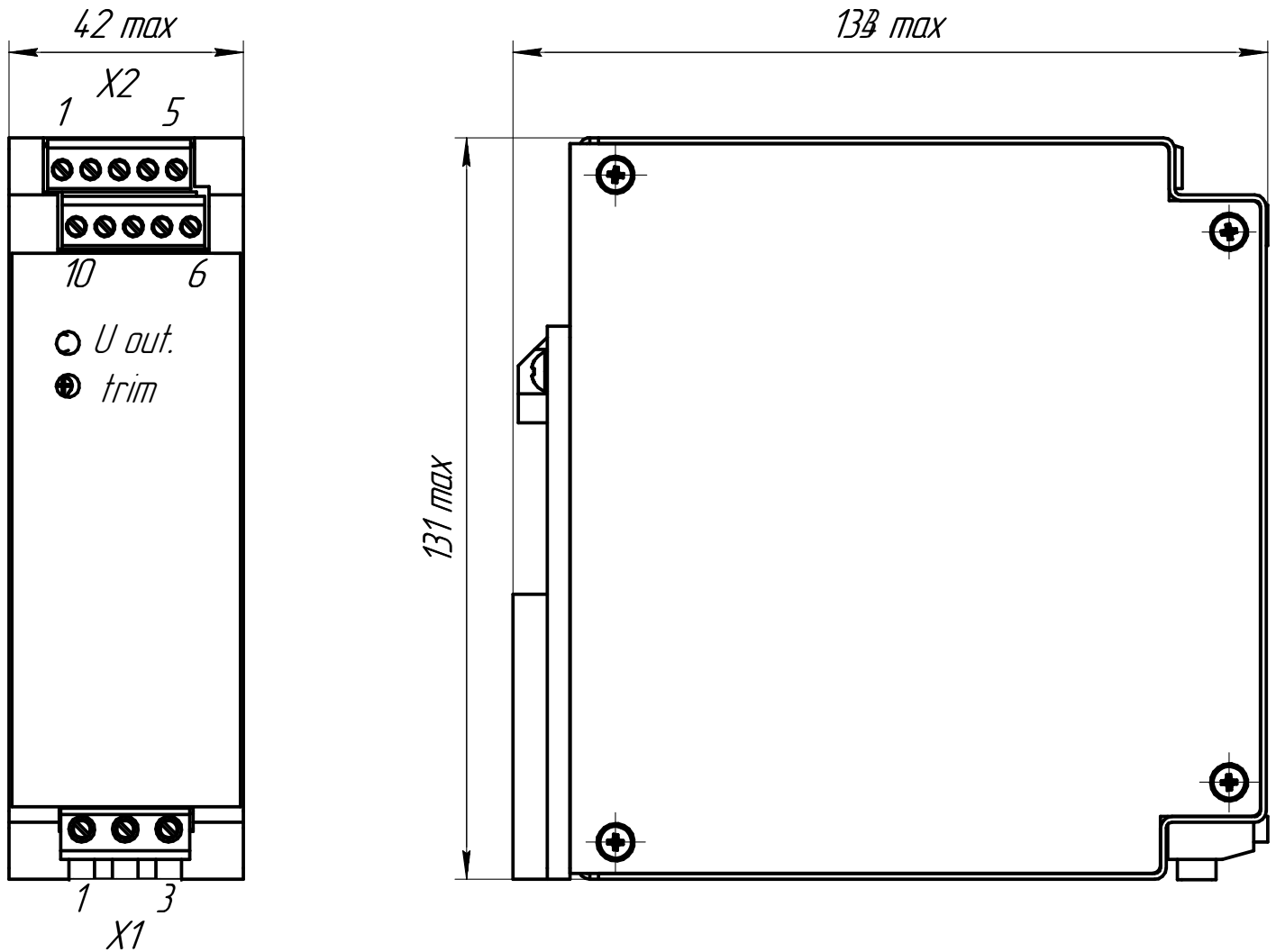


Example: when $U_{in} < 85$ V, no startup occurs, but the module remains functional under load, according to the graph.

Graph of maximum permissible power (load) depending on ambient temperature



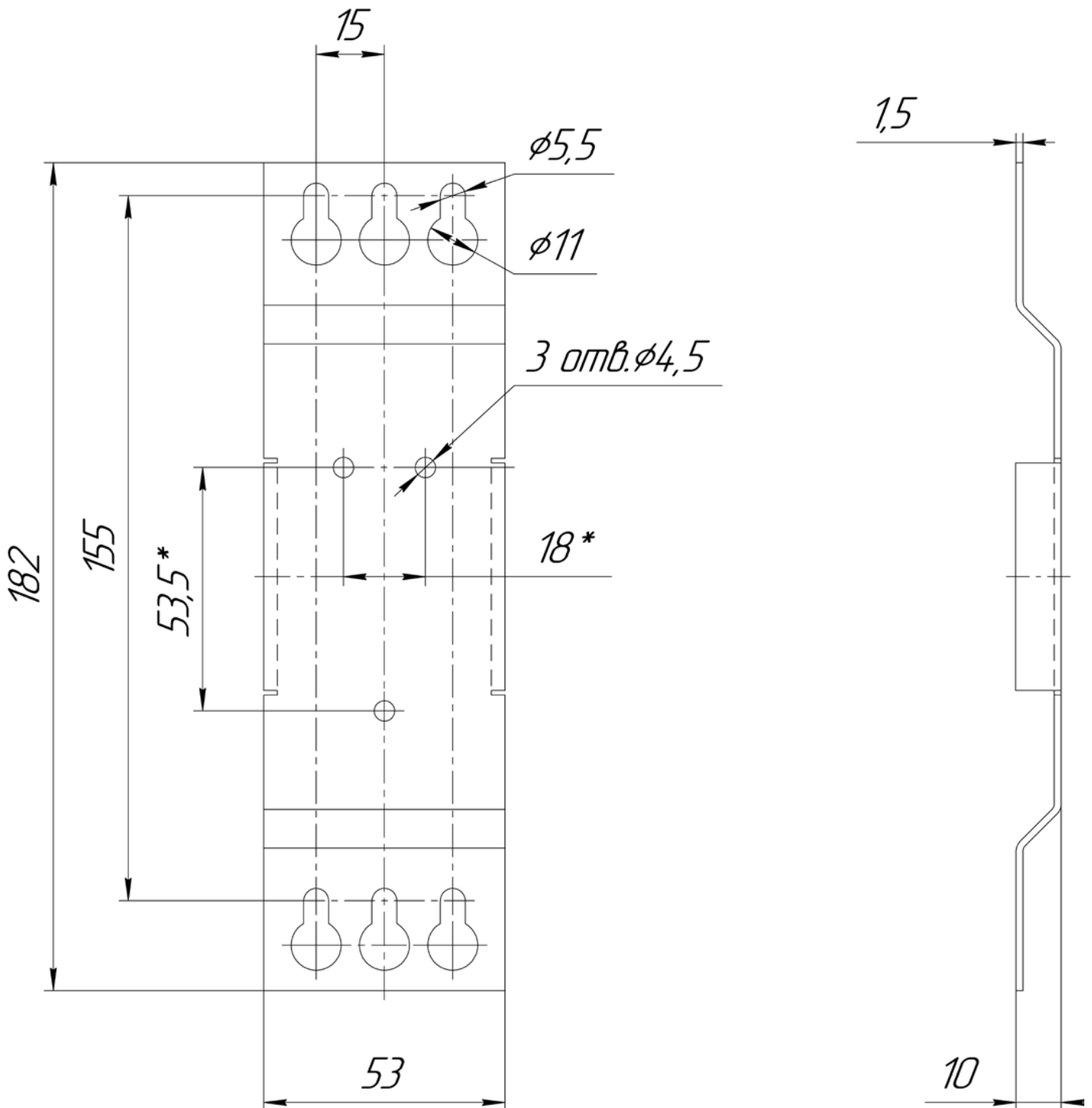
Dimensional diagram



Pin assignment

X1.1	X1.2	X1.3		
L	N	⊕		
X2.1	X2.2	X2.3	X2.4	X2.5
DC_OK	DC_OK	-Uout	-Uout	-Uout
X2.10	X2.9	X2.8	X2.7	X2.6
DIAG	TRIM	+Uout	+Uout	+Uout

Dimensional diagram of the bracket
Bracket ANZHE.745422.002



This datasheet is valid for the following units: KAN-D120C24X