

AC/DC power supply unit

KAN-D product line

KAN-D500, 500 W



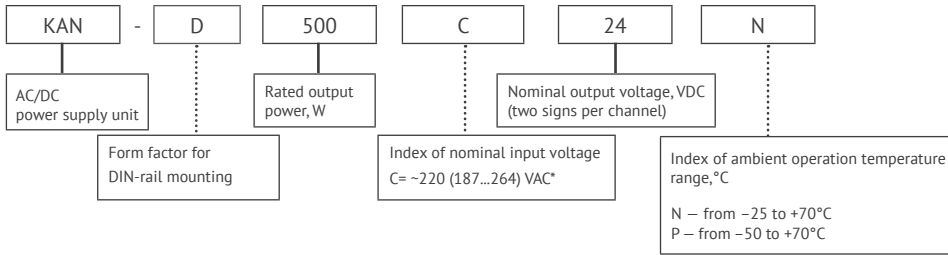
Global Data

Power	500 W
Output current	up to 20 A
Input voltage	~220 (187...264) V
Output voltage	=24 B
Efficiency	≥ 92%
Ambient operating temperature	-25...+70 °C; -50...+70 °C
Dry contact.....	based on high-current relay
EMC standart	ENC55022 (CISPR22)
Replacement/Installation	toolless
Installation.....	DIN rail
Dimensions	62×133×131 mm
Warranty	2 years

Advantages

- ◀ Parallel connection without additional components
- ◀ Compliance with SIL2 safety level
- ◀ Operation from -50 °C
- ◀ Serial connection

Ordering information



Output specifications*

Parameter		Value	
Model		KAN-D500C24	
Nominal output voltage, VDC		24	
Output voltage adjustment range, V	Built-in potentiometer	±16,7%	20...28
	by Adj U**	-4...+4%	23,04...24,96
Efficiency, %		≥92	
Output current max., A		20	
Ripple and noise (peak-to-peak)		<2% Uout nom	
Line and load regulation		no more 2	
Start-up time		<1 s (Uin.220 VAC)	
Serviceability output signal	Dry contact	Maximum switchable voltage and current	250 VAC/ 30 VDC/ 10 A
		Relay current consumption, mA	10
		Relay cut-off voltage, V	18...20
		"Diag" output	open collector 100 mA 45 V max
Parallel connection		without additional components	
Remote shutdown		off when 3,3...10 V (3...18 mA) is applied to the "Remote off" outputs terminals (polarity must be observed).	
Maximum load capacity, uF		22 000 uF(Uin. 220 V)	

Input specifications*

Parameter	Value
Input voltage range, VAC	~187...264 VAC =263...372 VDC
Mains frequency range, Hz	47-63 AC
	0 DC
Consumed current, A	<2,95 (~187 V) <2,45 (~220 V)
Inrush current pulse	30 A
Pre-fuse	10 A (inert type, internal)
Power factor corrector	active
Power factor	>0,95

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

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

*** Start-up at -40 °C is possible.

Protections

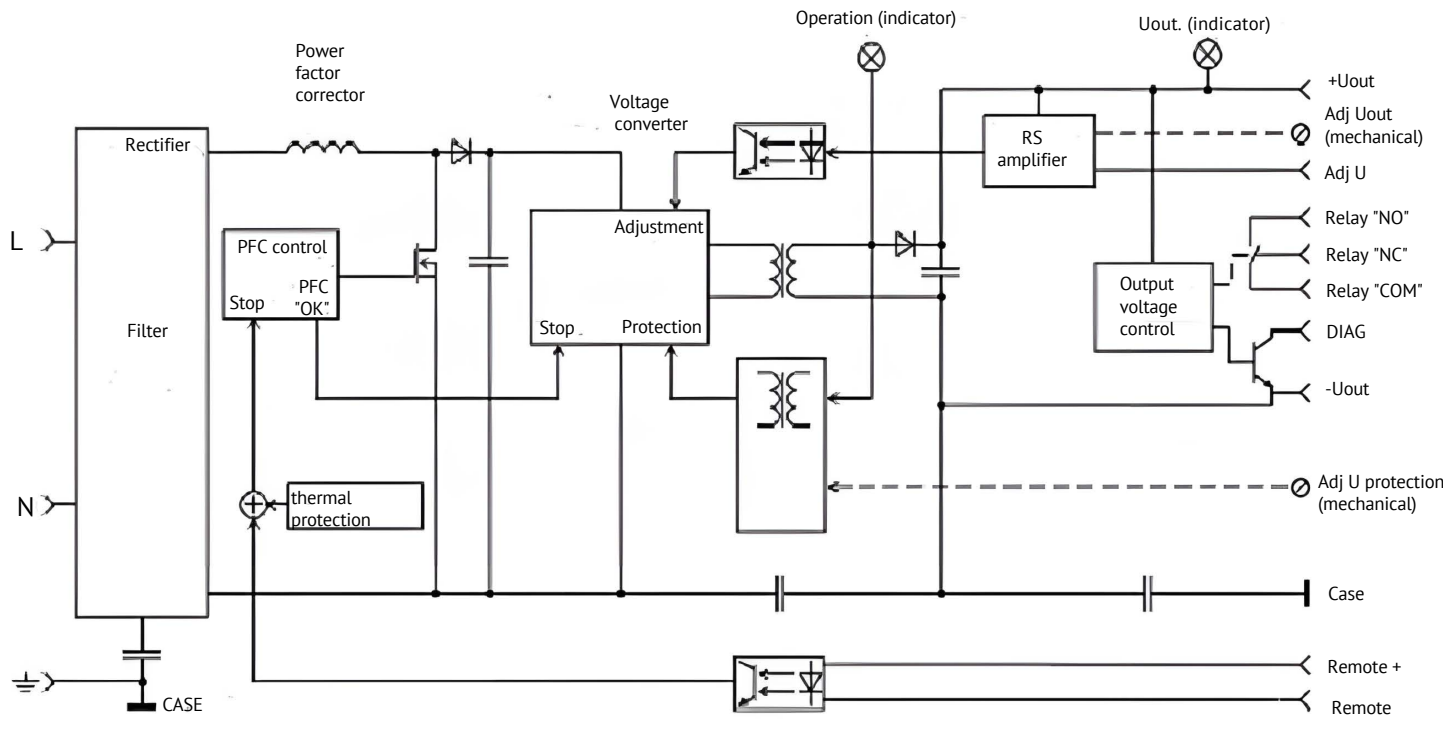
Type of protection	
Short-circuit protection	auto recovery
Overcurrent protection	Pmax...1,2 P,max
Overload protection level, V	<120% Uout nom
Over temperature protection	actuation at ambient temperature >70 °C

Basic specifications

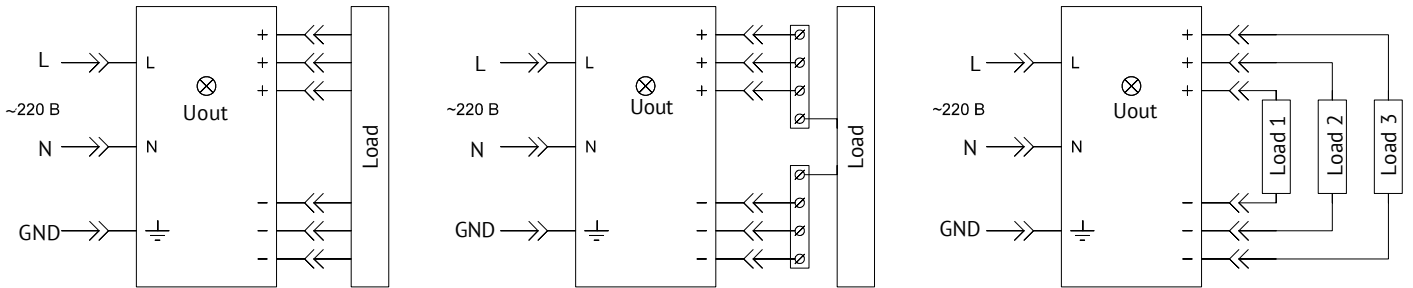
Parameter		Value
Type of connection		plug-in screw terminals
Degree of protection		-2% / °C after +40°C
EMC requirements		IP20
EMC requirements		EN55022 (CISPR22), Class B
Ambient temperature, operation , °C	N	-25...+70°C
	P	-50...+70°C ¹
Ambient temperature, storage, °C		-50...+70°C
Permissible humidity(operation)		85 % at t° ambient +40 °C (95 % at t° ambient +25 °C)
Isolation voltage, V	in /case	~3000 VAC
	in /out	~3000 VAC
	out /case	~1500 VAC
Isolation resistance @ 500 VDC		≥ 20 MOhm min
Cooling		convectonal
MTBF		1 400 000 Hrs
Case material		metal
Dimensions (W×D×H), mm		62×133×131
Weight, kg		no mote than 2
Mounting position		Vertical, for horizontal DIN-rail
Mounting instructions		Indentation between modules: horizontally 5 mm min.; 15 mm between active modules; vertically 50 mm min.
Warranty		2 year

¹ Starting on XX at -50°C, operating temperature -40°C

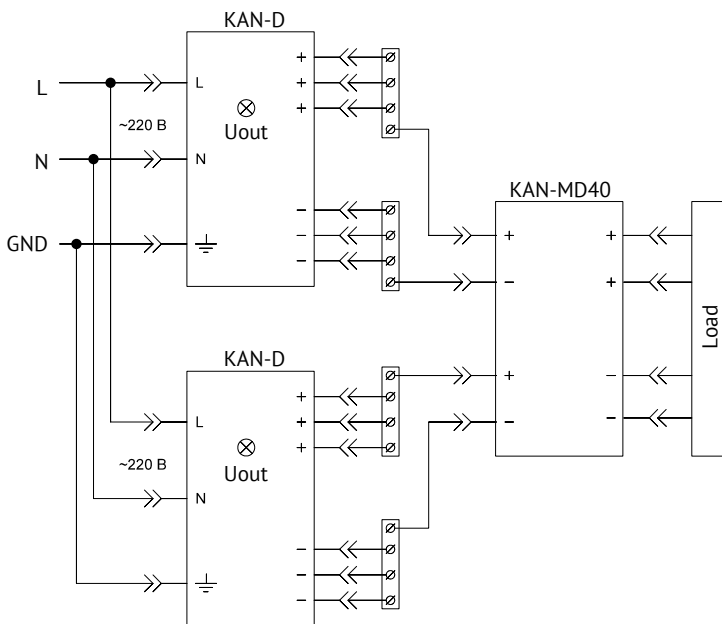
Structure scheme



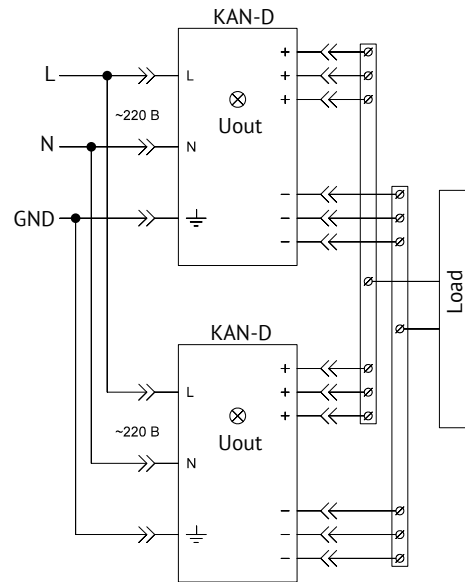
Connection diagram Typical connection



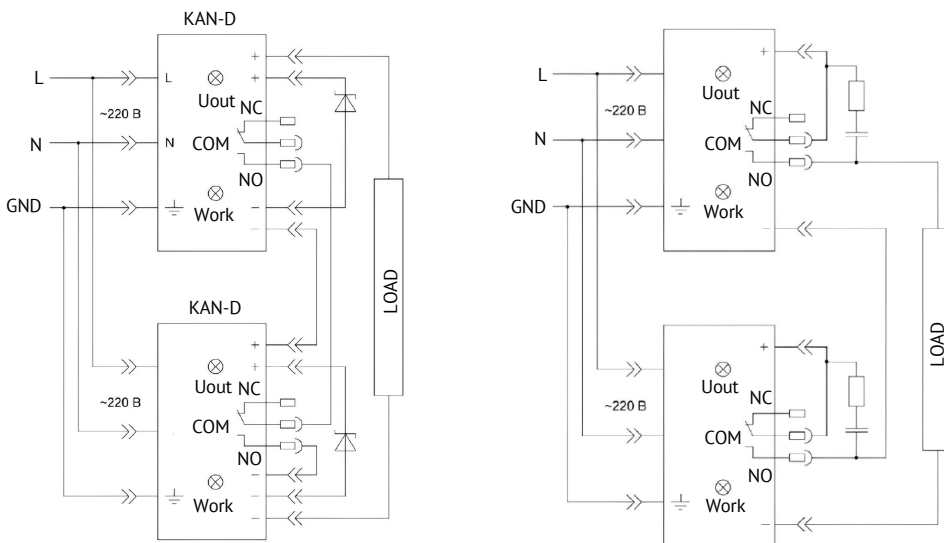
Parallel connection (redundant mode)



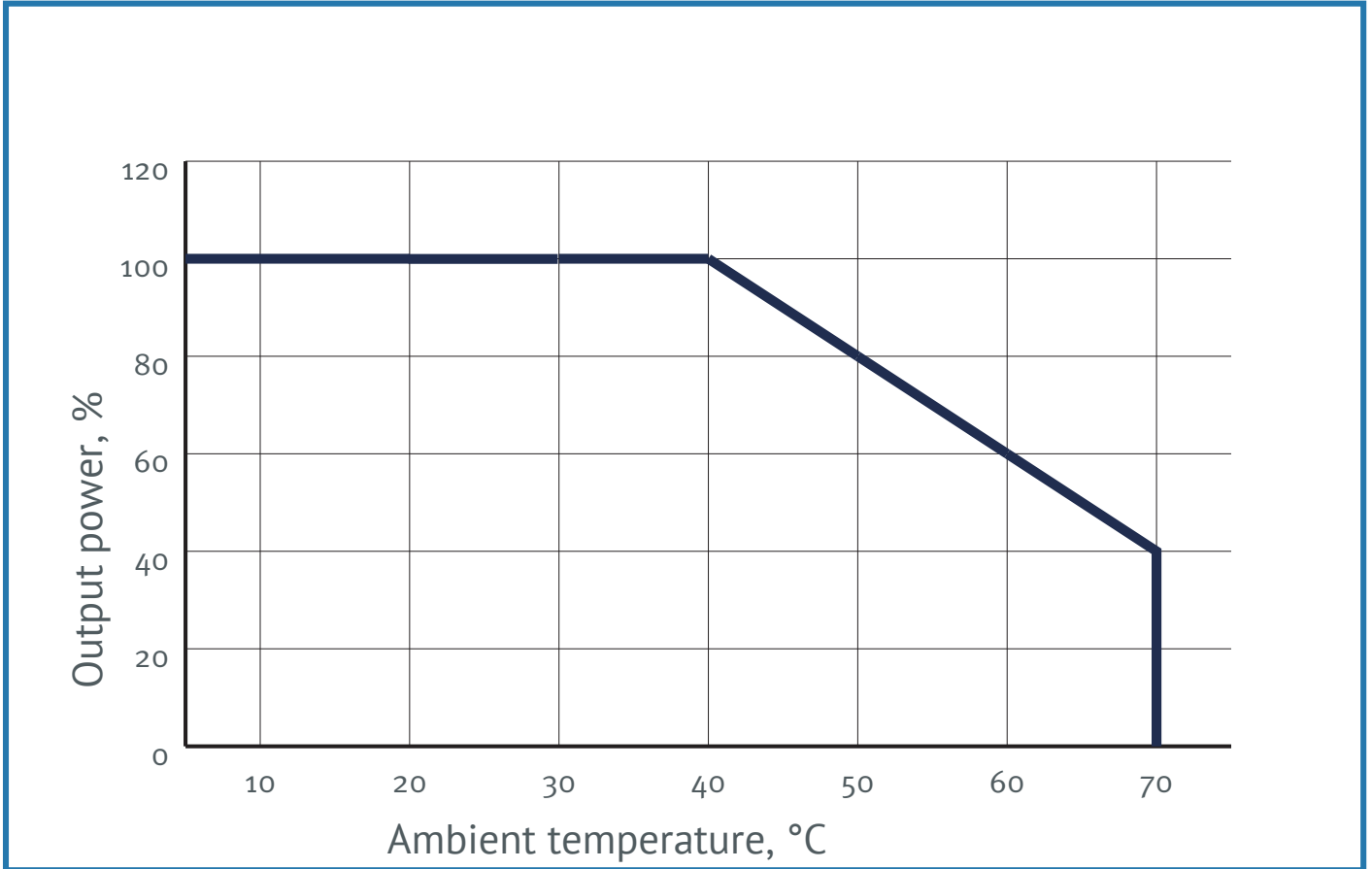
Parallel connection (power ramp-up)



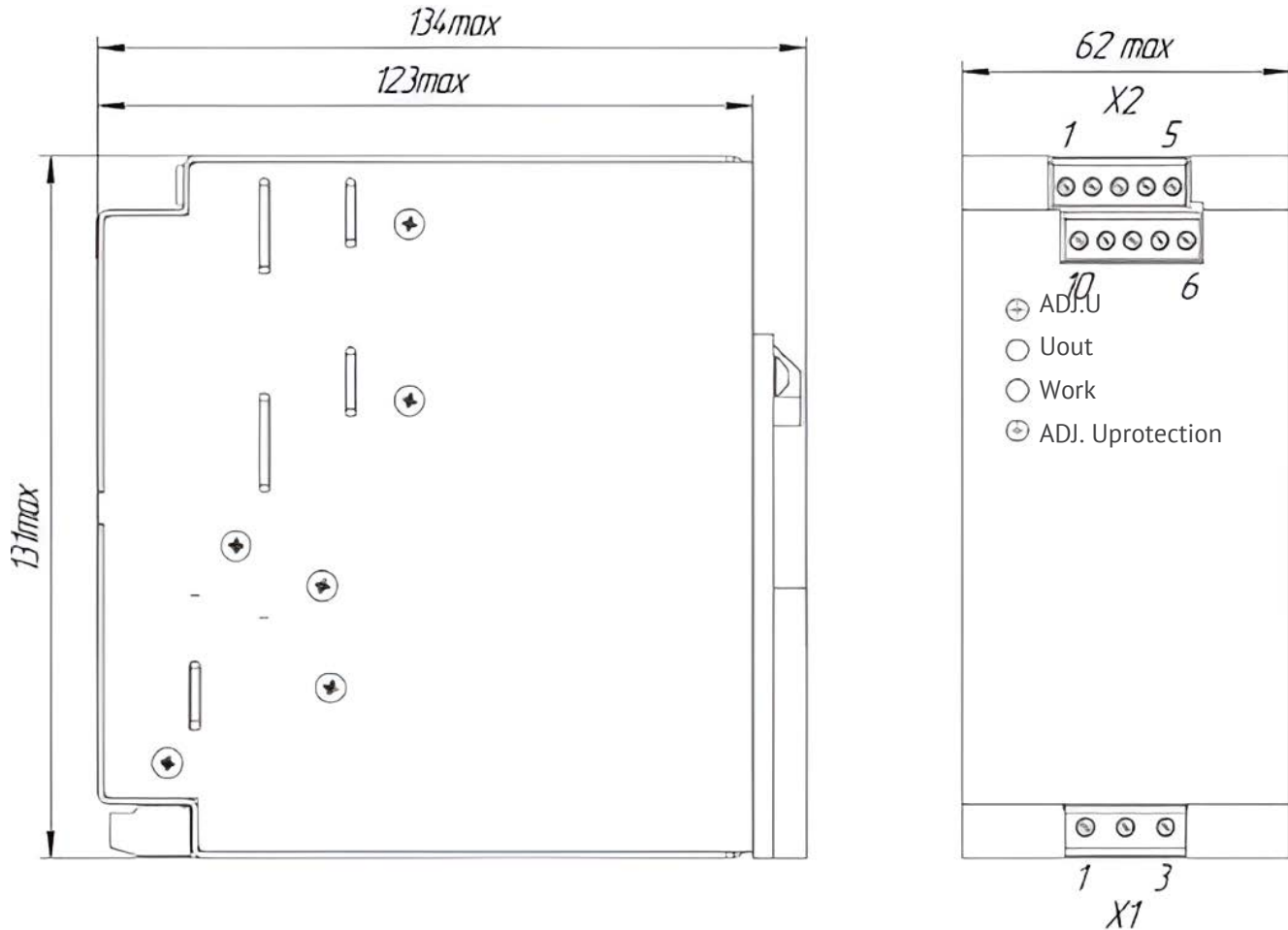
Series connection (no more than 2)



Power Derating
Temperature dependence



Dimensions drawing



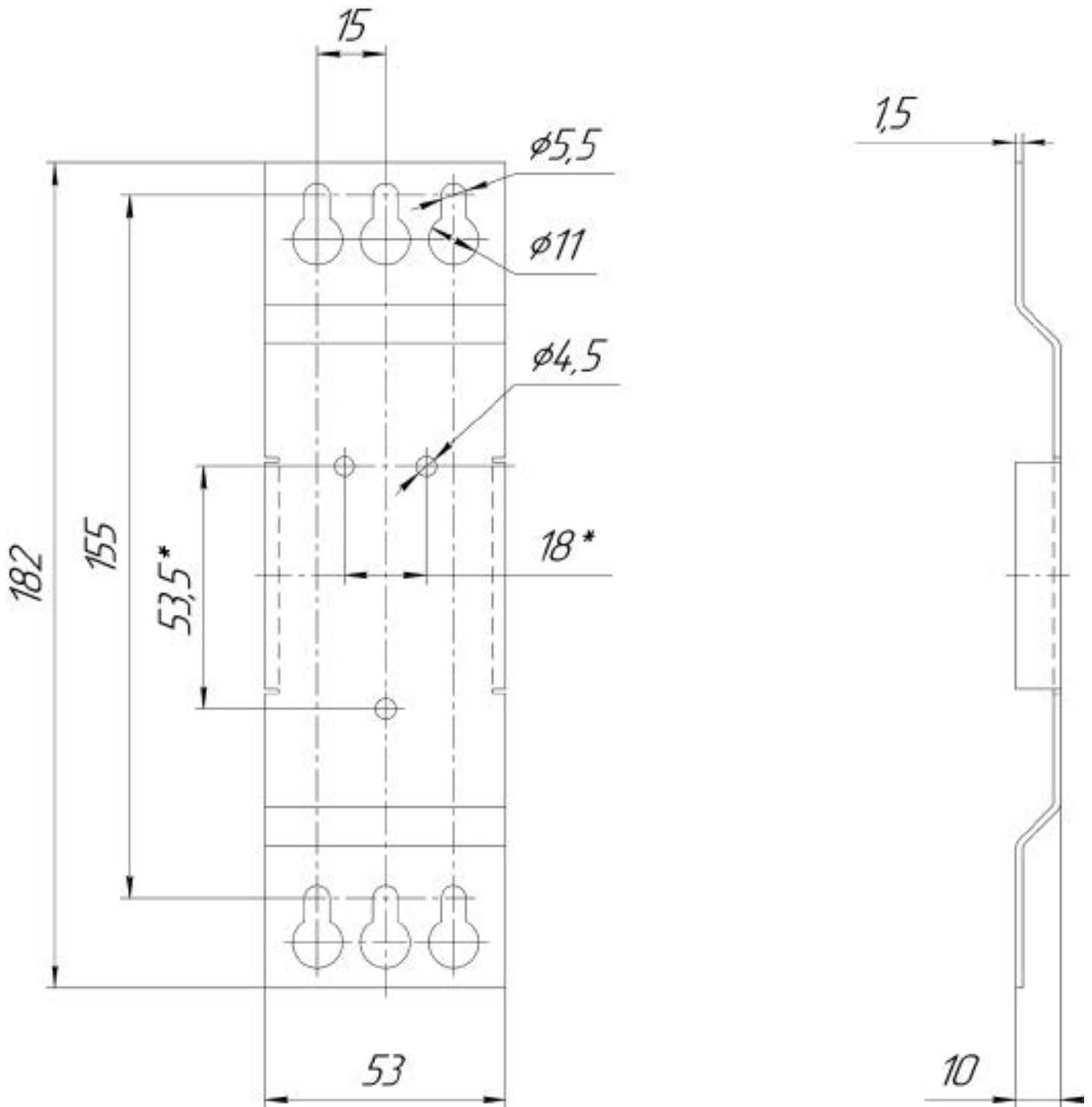
Pin assignment

X1.1	X1.2	X1.3
L	N	⊕

X2.1	X2.2	X2.3	X2.4	X2.5
DRY CONTACT+	DRY CONTACT-	-OUT	-OUT	-OUT

X2.10	X2.9	X2.8	X2.7	X2.6
DIAG	ADJ.U	+OUT	+OUT	+OUT

Bracket dimensional drawing
Bracket ANZHE.745422.002



This datasheet is valid for the : KAN-D500C24

¹ To be ordered separately