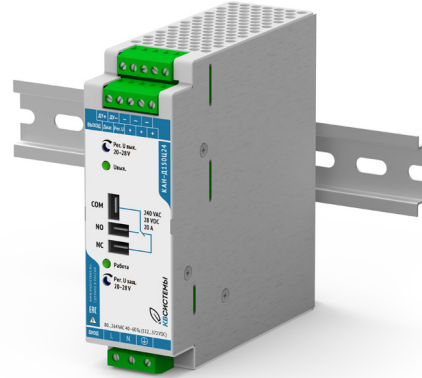


# AC/DC power supply unit

## KAN-D product line

### KAN-D150, 150 W



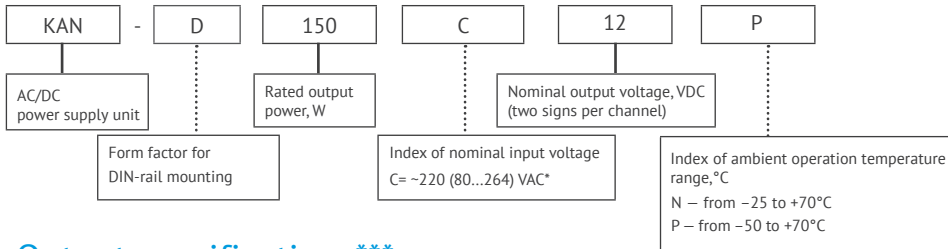
#### Global Data

|                                     |                             |
|-------------------------------------|-----------------------------|
| Power .....                         | 150 W                       |
| Output current .....                | up to 12,5 A                |
| Input voltage .....                 | ~220 (80..264) V            |
| Output voltage .....                | =12 V; =24 B; =48 V         |
| Efficiency .....                    | >90%                        |
| 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 .....                    | 42×134×131 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-D150C12P   | KAN-D150C24P                    | KAN-D150C48P |         |
| Nominal output voltage, VDC           |                                | 12   | 24                              | 48           |         |
| Output voltage adjustment range, MBCB | Built-in potentiometer ±16,7 % | 10...14  | 20...28                         | 40...52      |         |
|                                       | by Adj.U*** -4...+4 %          | 11,4...12,6  | 22,8...25,2                     | 25,6...50,4  |         |
| Efficiency, %                         |                                | ≥ 90   |                                 |              |         |
| Rated output current, A               |                                | 12,5   | 6,25                            | 3,13         |         |
| Ripple and noise (peak-to-peak)       |                                | <2%  |                                 |              |         |
| Line and load regulation              |                                | no more 2%   |                                 |              |         |
| Start-up time***, sec                 |                                | 1 (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/ 10 A           |              |         |
|                                       |                                | Relay current consumption, mA  | 90                              | 45           | 25      |
|                                       |                                | Relay cut-off voltage, V   | 8...10                          | 18...20      | 36...40 |
|                                       | "Diag" output                  |  | open collector 100 mA, 45 V max |              |         |
| Parallel operation***                 |                                | without additional components  |                                 |              |         |
| Remote shutdown                       |                                | off when 5...20 V (3...18 mA) is applied to the "remote control" terminals (polarity must be observed) |                                 |              |         |
| Maximum load capacity, uF             |                                | 33000  | 20000                           | 5000         |         |

### Input specifications\*

| Parameter                 |              | Value                          |  |
|---------------------------|--------------|--------------------------------|--|
| Input voltage range, VAC  |              | ~80...264<br>=112...372        |  |
| Mains frequency range, Hz |              | 47-63 AC<br>0 DC               |  |
| Consumed current, A       |              | 1.39 (~120 V)<br>0.76 (~220 V) |  |
| Inrush current pulse      |              | 25 A                           |  |
| Pre-fuse                  |              | 5 (inert type, internal)       |  |
| Power factor corrector    |              | active                         |  |
| Power factor              | ~115 V; Pmax | 0,99                           |  |
|                           | ~230 V; Pmax | 0,95                           |  |

\* For KAN-D150CXX

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

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

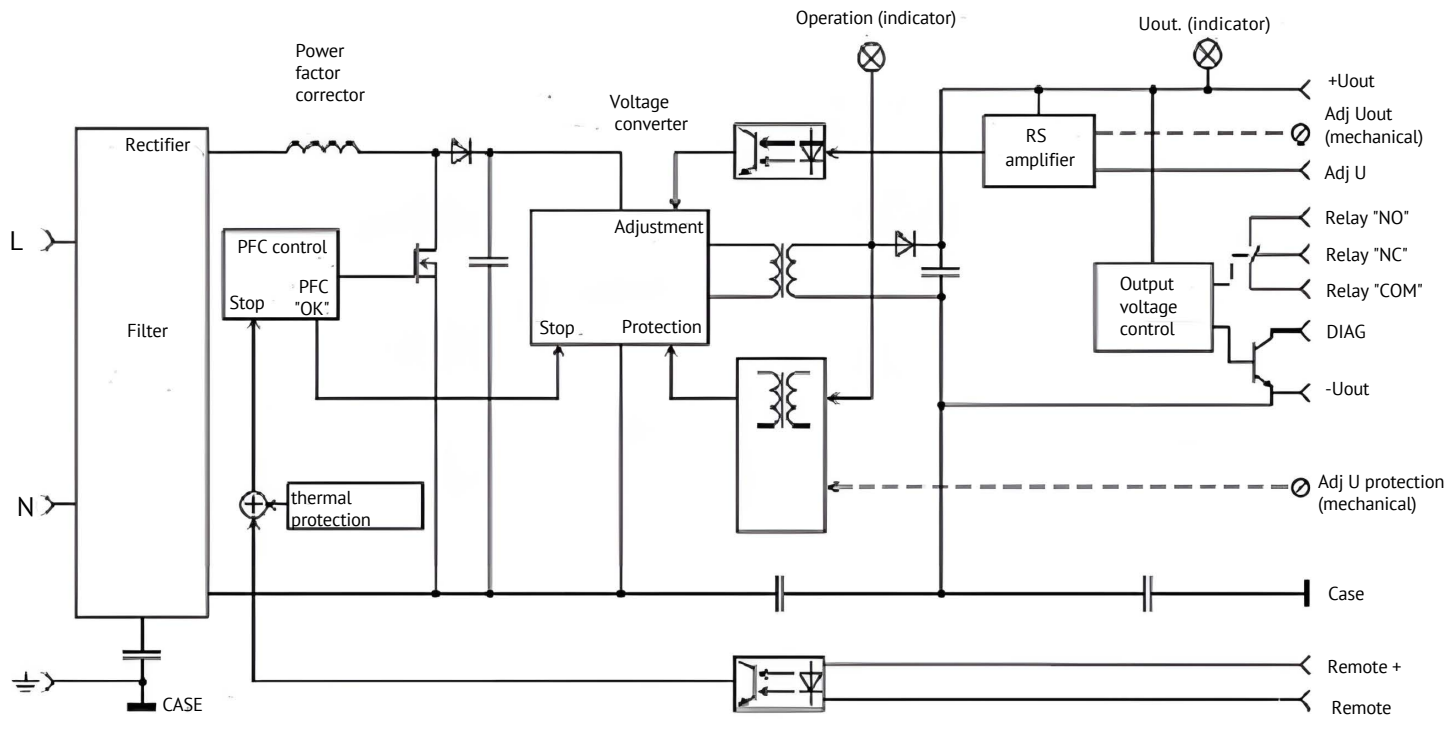
### Protections

| Type of protection                     | Value   |
|--|---|
| circuit protection**                   | automatic restart after 5 sec. after the short-circuit has been removed |
| Overcurrent protection Pmax...1.2 Pnom | automatic restart after 5 sec after overload removal                    |
| Output voltage overload protection**   | <125% Uout nom  |
| Overheating protection                 | T ambient > 70 °C   |

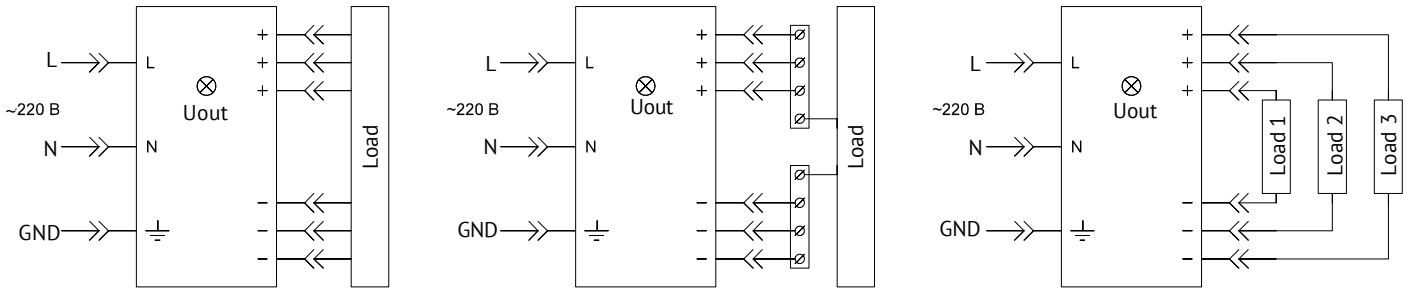
### Basic specifications

| 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, operation , °C | N  | -25...+70°C |
|                                     | P  | -50...+70°C |
| 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                             | convectioanal  |             |
| MTBF                                | 1 400 000 Hrs  |             |
| Case material                       | metal  |             |
| Dimensions (W×D×H), mm              | 42×134×131   |             |
| Weight, kg                          | no more than 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 year   |             |

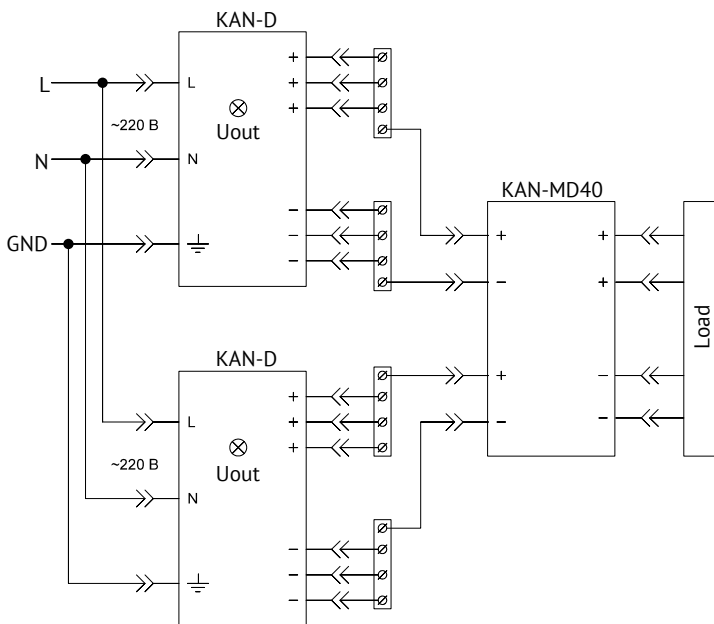
## Block diagram



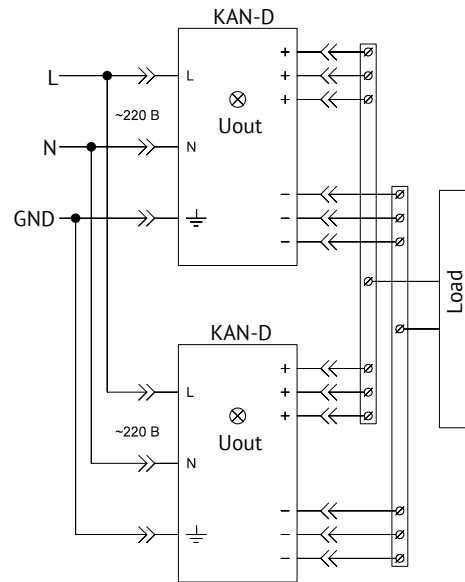
## Connection diagram Typical connection



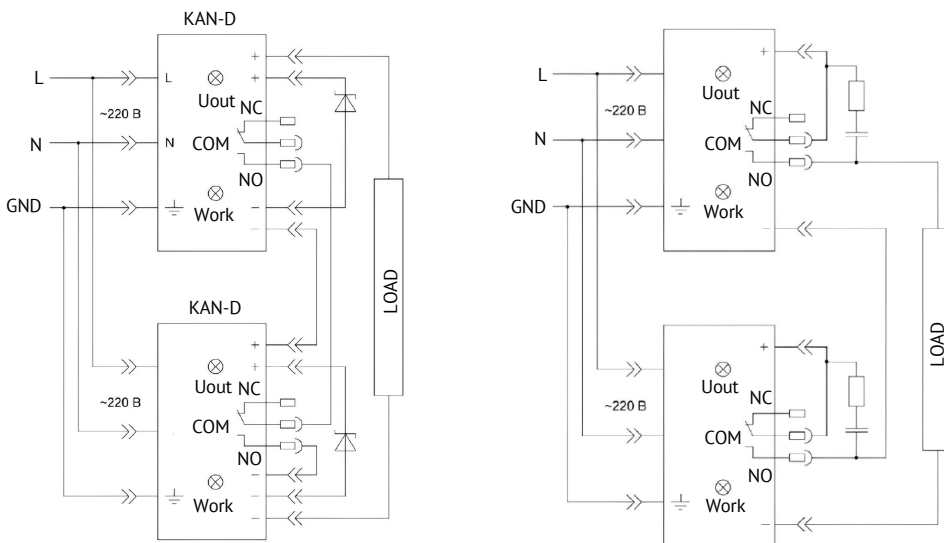
## Parallel connection (redundant mode)



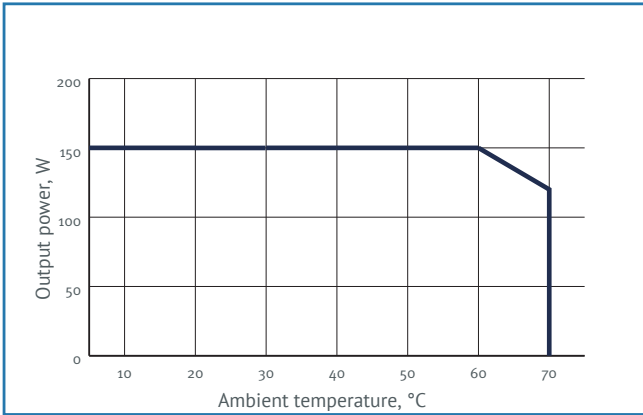
## Parallel connection (power ramp-up)



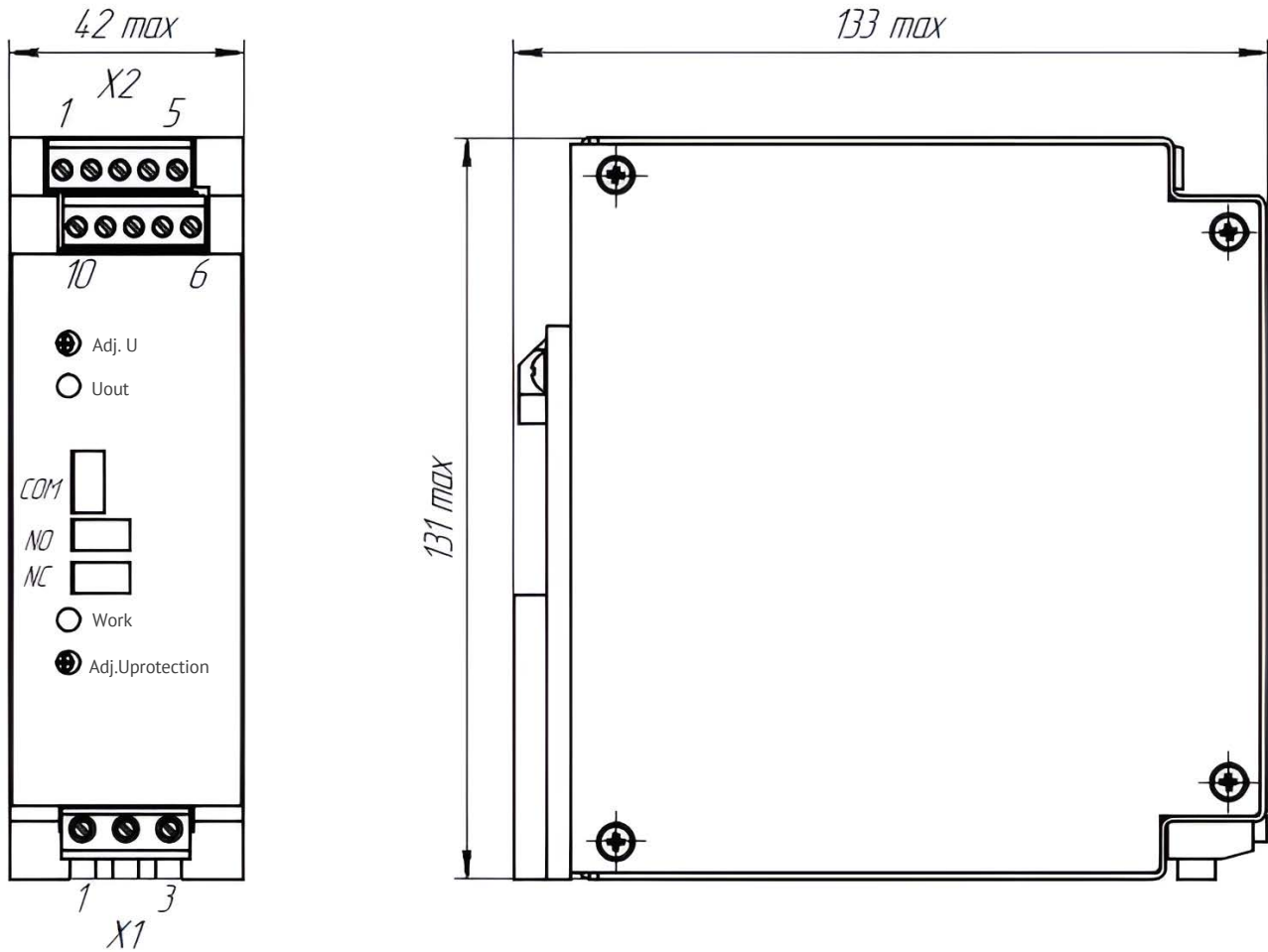
## Series connection (no more than 2)



**Derating**  
Temperature dependence



Dimensions drawing

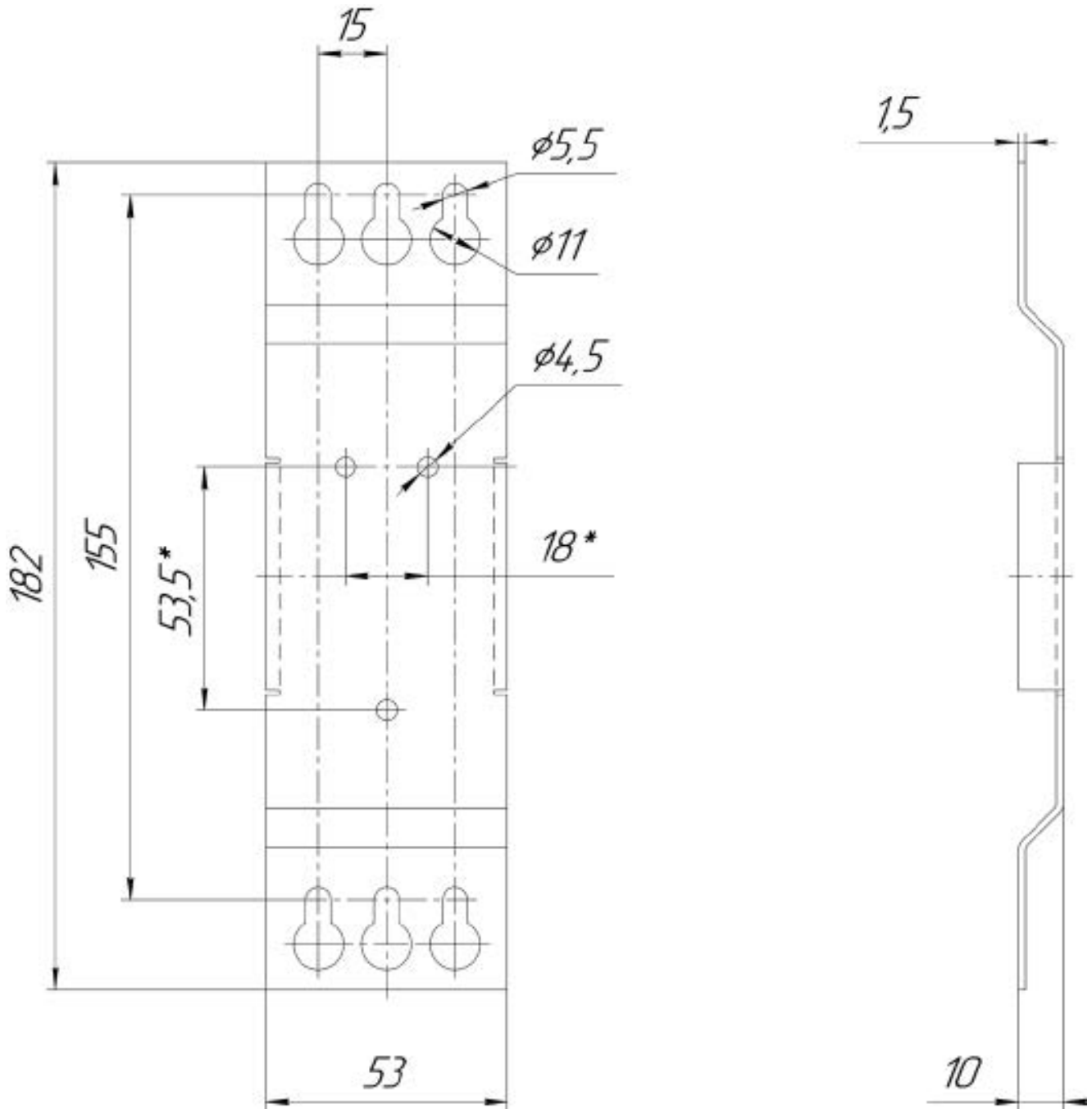


| X1.1 | X1.2 | X1.3 |
|------|------|------|
| L    | N    | ⊕    |

| X2.1        | X2.2         | X2.3 | X2.4 | X2.5 |
|-------------|--------------|------|------|------|
| +REMOTE OFF | - REMOTE OFF | -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-D150C12P, KAN-D150C24P, KAN-D150C48P

<sup>1</sup> To be ordered separately