



NJRP5 soft starter

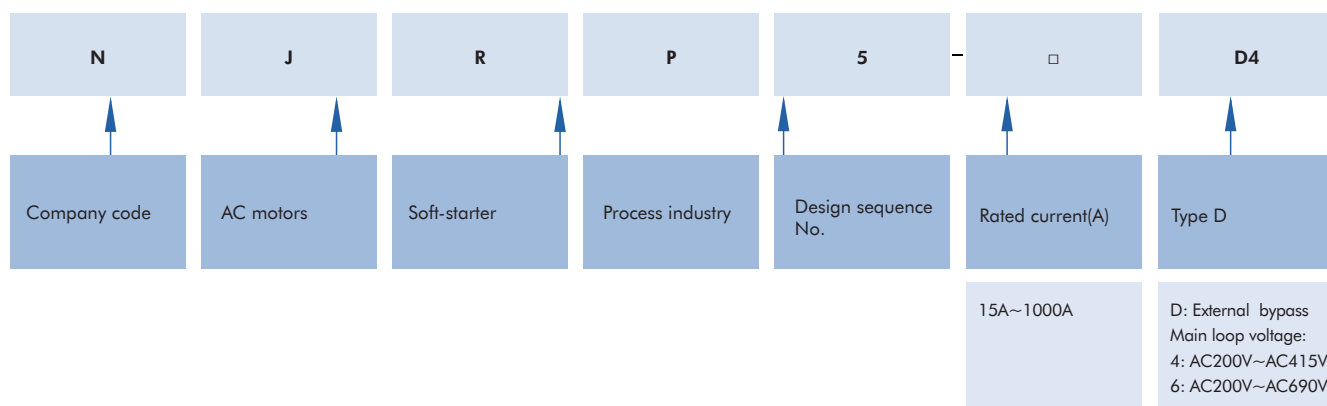
1. Product overview

NJRP5 series soft starter is an external bypass soft starter. Its input power voltage (main circuit voltage) is AC200V~415V and AC200V~690V respectively. Three phase AC asynchronous motor soft starter designed based on power electronics technology, microprocessor technology and modern control theory technology has the characteristics of strong load adaptability, stable and reliable operation, and is widely used in metallurgy Petroleum, fire protection, mining, water supply, municipal administration, food, cement, petrochemical and other industries are the most ideal replacement products for the traditional star delta starting and auto coupling depressurization starting.

Standard: GB/T 14048.6, IEC 60947-4-2

Conformity certification: CCC, CE

2. Type designation



3. Environmental conditions

3.1 Normal use, transportation and storage conditions

3.1.1 The ambient temperature is between -10°C~+40°C, +40°C~+50°C should be derated, and the current should be derated by 2% for every 1°C increase;

3.1.2 The storage temperature is -25°C~+70°C;

3.1.3 The relative humidity should not exceed 95% (+20°C~+65°C);

3.1.4 No condensation, no flammable, explosive gas, no conductive dust, good ventilation;

3.1.5 If the altitude exceeds 1000m, it should be derated accordingly, and the current above 1000m and less than 3000m will be derated by 0.5% for every additional 100m, and special customization will be required for more than 3000m;

3.1.6 Vibration should be avoided as much as possible for soft starters;

3.1.7 If the ambient temperature of the site is lower than -10°C or has not been powered on for 18 months, it should be powered on and preheated for more than 30 minutes before operation.

4. Selection table

NJRP5-*/D4

Product Model Number	Rated voltage: U _e (main power supply)	Rated current I _n	Rated power / rated current of the adapted motor	
			U _e =AC220V	U _e =AC380V
NJRP5-15/D4	AC200V-415V	15A	4kW/15A	7.5kW/15A
NJRP5-22/D4	AC200V-415V	22A	5.5kW/22A	11kW/22A
NJRP5-30/D4	AC200V-415V	30A	7.5kW/29A	15kW/29A
NJRP5-37/D4	AC200V-415V	37A	11kW/36A	18.5kW/36A
NJRP5-44/D4	AC200V-415V	44A	11kW/42A	22kW/42A
NJRP5-60/D4	AC200V-415V	60A	15kW/57A	30kW/57A
NJRP5-74/D4	AC200V-415V	74A	18.5kW/70A	37kW/70A
NJRP5-90/D4	AC200V-415V	90A	22kW/84A	45kW/84A
NJRP5-110/D4	AC200V-415V	110A	30kW/103A	55kW/103A
NJRP5-150/D4	AC200V-415V	150A	37kW/140A	75kW/140A
NJRP5-180/D4	AC200V-415V	180A	45kW/167A	90kW/167A
NJRP5-220/D4	AC200V-415V	220A	55kW/207A	110kW/207A
NJRP5-264/D4	AC200V-415V	264A	75kW/248A	132kW/248A
NJRP5-320/D4	AC200V-415V	320A	90kW/300A	160kW/300A
NJRP5-370/D4	AC200V-415V	370A	110kW/349A	185kW/349A
NJRP5-440/D4	AC200V-415V	440A	110kW/404A	220kW/404A
NJRP5-500/D4	AC200V-415V	500A	132kW/459A	250kW/459A
NJRP5-560/D4	AC200V-415V	560A	160kW/514A	280kW/514A
NJRP5-630/D4	AC200V-415V	630A	160kW/579A	315kW/579A
NJRP5-710/D4	AC200V-415V	710A	200kW/634A	355kW/634A
NJRP5-800/D4	AC200V-415V	800A	200kW/720A	400kW/720A
NJRP5-900/D4	AC200V-415V	900A	250kW/810A	450kW/810A
NJRP5-1000/D4	AC200V-415V	1000A	250kW/900A	500kW/900A

NJRP5-*/D4

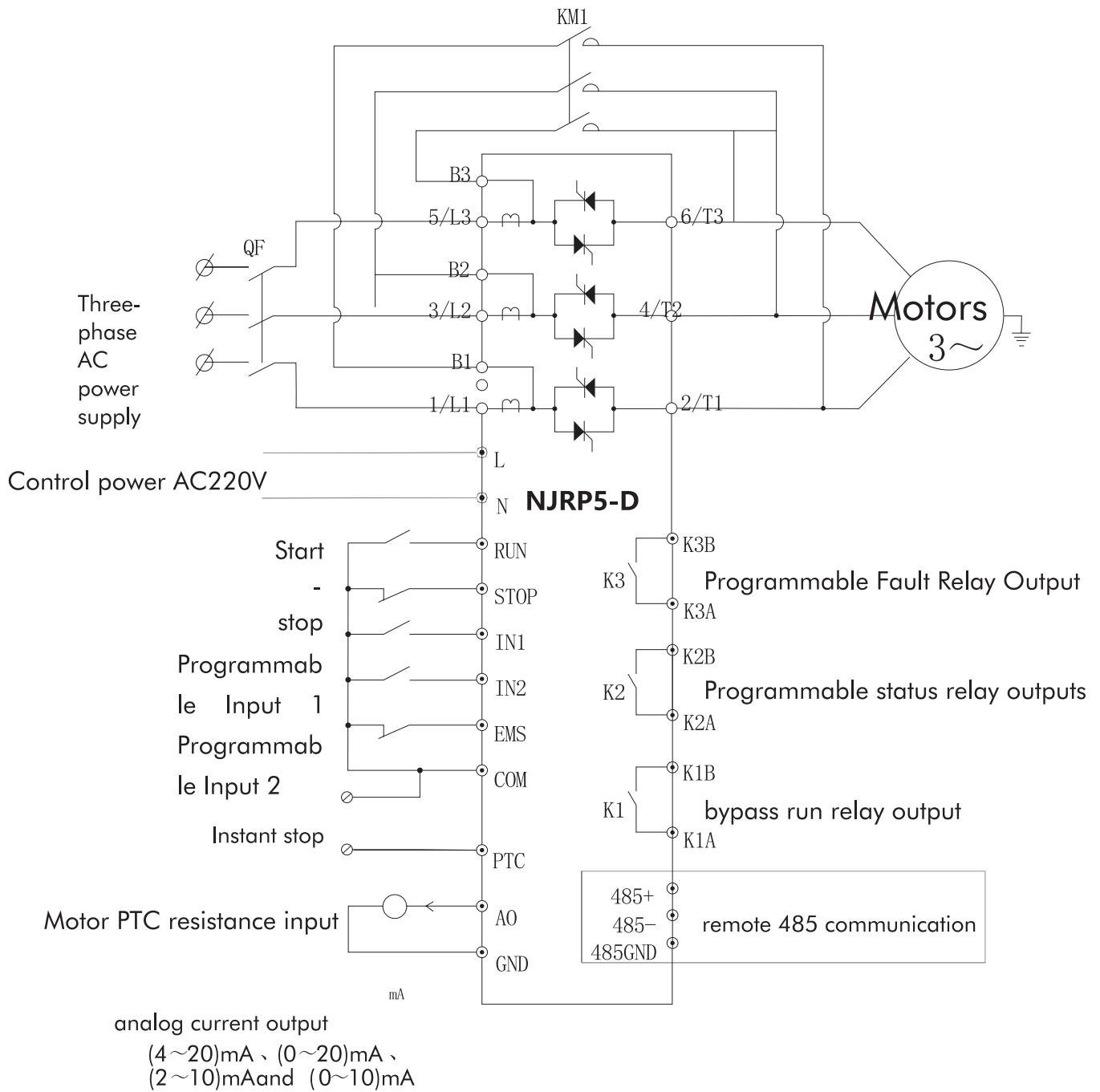
Product Model Number	Rated voltage: Ue (main power supply)	Rated current In	Applicable motor rated power (W)/rated current In (A)				
			Ue=AC220V	Ue=AC380V	Ue=AC460V	Ue=AC575V	Ue=AC690V
NJRP5- 15/D6	AC200-690	15	4kW/15A	7.5kW/15A	9kW/15A	11kW/15A	11kW/15A
NJRP5-22/D6	AC200-690	22	5.5kW/22A	11kW/22A	15kW/22A	18.5kW/22A	18.5kW/22A
NJRP5-30/D6	AC200-690	30	7.5kW/29A	15kW/29A	18.5kW/29A	22kW/29A	22kW/29A
NJRP5-37/D6	AC200-690	37	11kW/36A	18.5kW/36A	22kW/36A	30kW/36A	30kW/36A
NJRP5-44/D6	AC200-690	44	11kW/42A	22kW/42A	30kW/42A	30kW/42A	37kW/42A
NJRP5-60/D6	AC200-690	60	15kW/57A	30kW/57A	37kW/57A	45kW/57A	55kW/57A
NJRP5-74/D6	AC200-690	74	18.5kW/70A	37kW/70A	45kW/70A	55kW/70A	75kW/70A
NJRP5-90/D6	AC200-690	90	22kW/84A	45kW/84A	55kW/84A	75kW/84A	90kW/84A
NJRP5- 110/D6	AC200-690	110	30kW/103A	55kW/103A	75kW/103A	75kW/103A	110kW/103A
NJRP5- 150/D6	AC200-690	150	37kW/140A	75kW/140A	90kW/140A	110kW/140A	132kW/140A
NJRP5- 180/D6	AC200-690	180	45kW/167A	90kW/167A	110kW/167A	132kW/167A	160kW/167A
NJRP5-220/D6	AC200-690	220	55kW/207A	110kW/207A	132kW/207A	160kW/207A	200kW/207A
NJRP5-264/D6	AC200-690	264	75kW/248A	132kW/248A	150kW/248A	185kW/248A	250kW/248A
NJRP5-320/D6	AC200-690	320	90kW/300A	160kW/300A	185kW/300A	250kW/300A	315kW/300A
NJRP5-370/D6	AC200-690	370	110kW/349A	185kW/349A	220kW/349A	280kW/349A	355kW/349A
NJRP5-440/D6	AC200-690	440	110kW/404A	220kW/404A	250kW/404A	315kW/404A	400kW/404A
NJRP5-500/D6	AC200-690	500	132kW/459A	250kW/459A	280kW/459A	355kW/459A	400kW/459A
NJRP5-560/D6	AC200-690	560	160kW/514A	280kW/514A	315kW/514A	400kW/514A	500kW/514A
NJRP5-630/D6	AC200-690	630	160kW/579A	315kW/579A	355kW/579A	450kW/579A	560kW/579A
NJRP5-710/D6	AC200-690	710	200kW/634A	355kW/634A	400kW/634A	500kW/634A	630kW/634A
NJRP5-800/D6	AC200-690	800	200kW/720A	400kW/720A	450kW/720A	560kW/720A	710kW/720A
NJRP5-900/D6	AC200-690	900	250kW/810A	450kW/810A	560kW/810A	630kW/810A	800kW/810A
NJRP5- 1000/D6	AC200-690	1000	250kW/900A	500kW/900A	560kW/900A	800kW/900A	900kW/900A

5. Detailed technical parameters and performance

Serial number	Rated voltage: U _e (main power supply)	Rated current I _n
1	Main power supply voltage U _e (V)	NJRP5- /D4:AC200~415(-10%~+10%)NJRP5- / D6:AC200~690(-10%~+10%)
2	main power frequency	When the starting mode is current mode (more applicable to the closing of power plant): 35Hz~60Hz When the starting mode is non current mode: 50Hz ± 2Hz, 60Hz ± 2Hz
3	Control power voltage U _s (V)	AC220(-10%~+10%)
4	Control power frequency (Hz)	50±2、60±2
5	Applicable motors	ordinary squirrel-cage three -phase asynchronous motors
6	Applicable motors	Level 3
7	Rated insulation voltage U _i (V)	NJRP5- /D4:AC660 NJRP5- /D6:AC1000
8	Rated impulse withstand voltage U _{imp} (kV)	8
9	Cooling method	Natural cooling
10	Starting frequency	The frequency per hour can be set, and it is recommended that it should not be more than 10 times per hour (the heavier the load, the lower the starting frequency should be, if it is necessary to start frequently, make sure that the temperature of the motor and the soft starter are at a lower temperature) ① .
11	seismic capacity	Vibration is less than 0.5g
12	EMC equipment level	Grade A (industrial grade)
13	Starting voltage	30%U _e ~70%U _e
14	Starting limiting current	50%I _e ~500%I _e
15	overload protection rating	Level 2, 10A, 10, 20 and 30
16	Relay Output	Three way relay output, online/bypass relay K1, programmable status relay K2, programmable fault relay K3.
17	digital inputs	Two programmable digital inputs: programmable input terminal IN1 and programmable input terminal IN2. Three digital inputs: start signal RUN, stop signal STOP and instant stop signal EMS.
18	analog output	Four output types are selected: 4mA~20mA, 0mA~20mA, 2mA~10mA and 0mA~10mA.

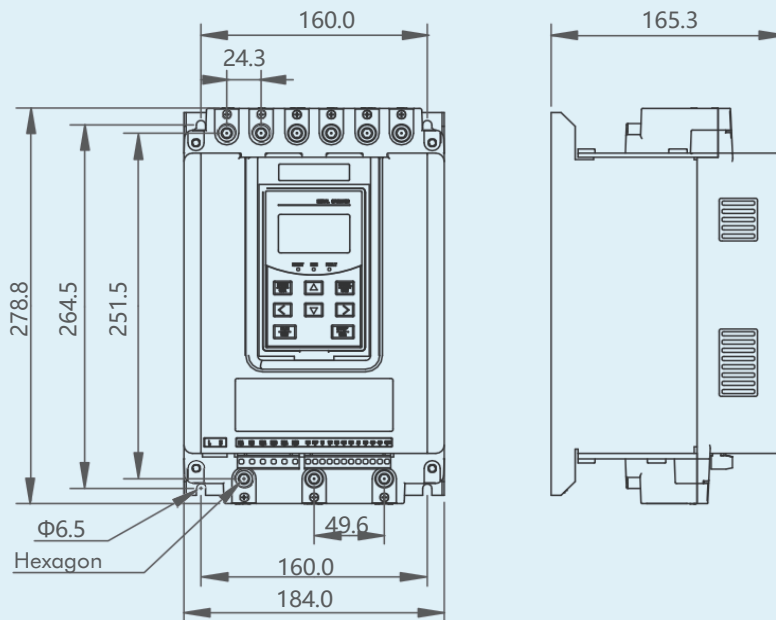
Note 1: When start current limit timeout protection or operation overload protection is reported, it will take 30 minutes before starting again.

6. Wiring diagram

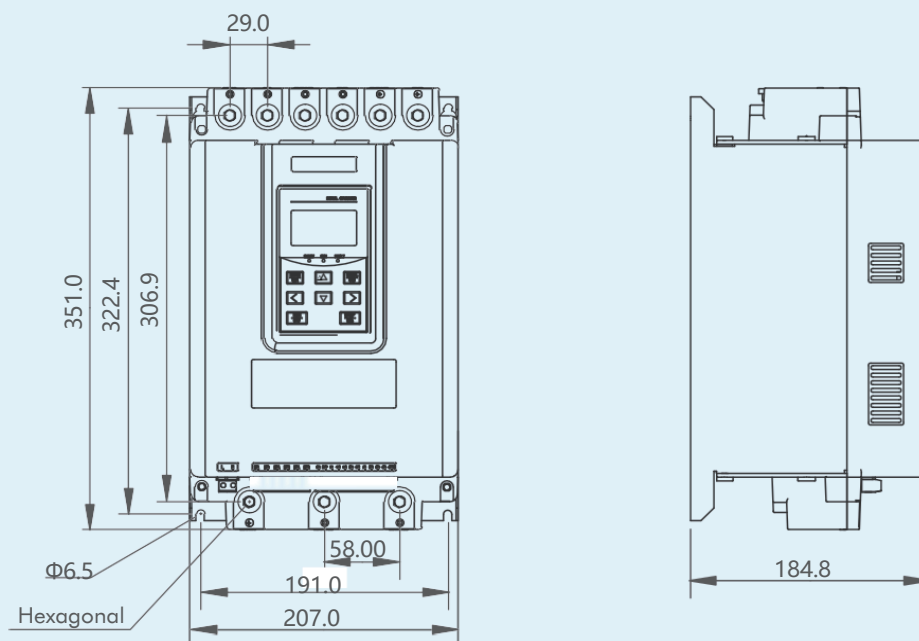


7. Shape and installation dimensions

NJRP5- 15~90

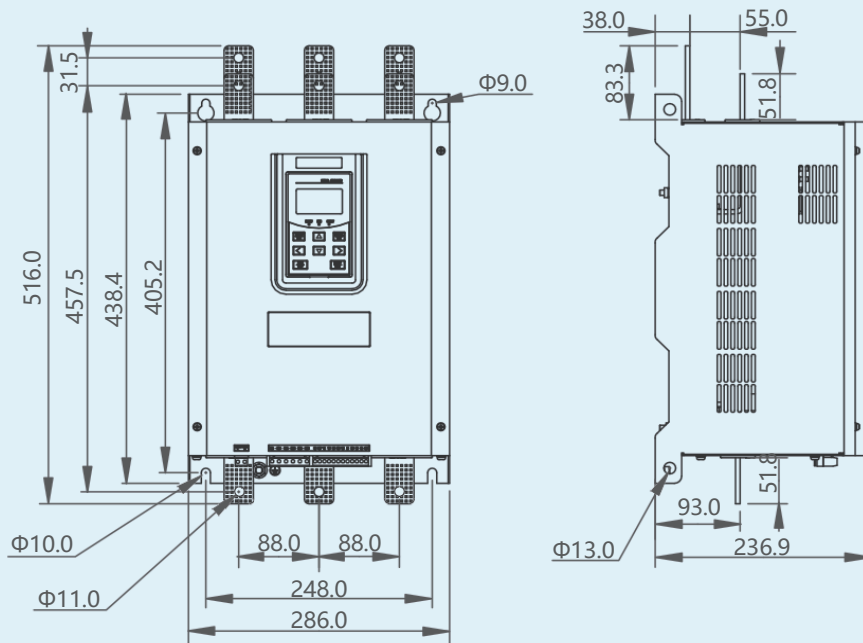


NJRP5- 110~150

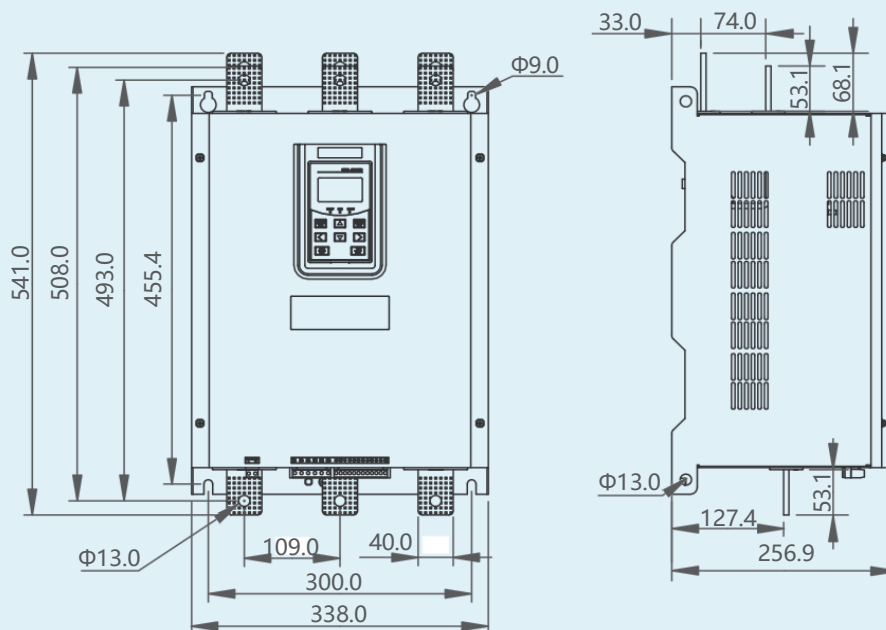


Unit: mm

NJRP5- 180~370

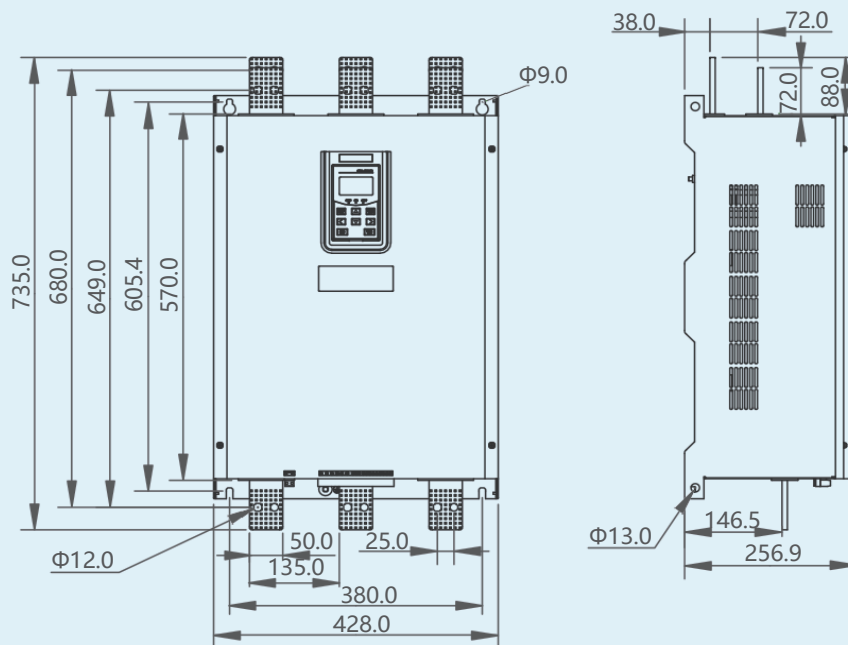


NJRP5-440~630



Unit: mm

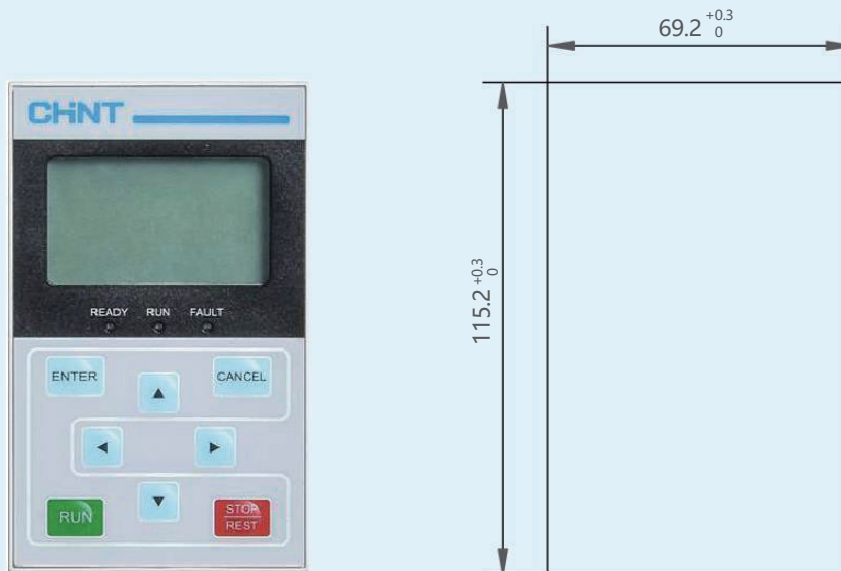
NJRP5-710~1000



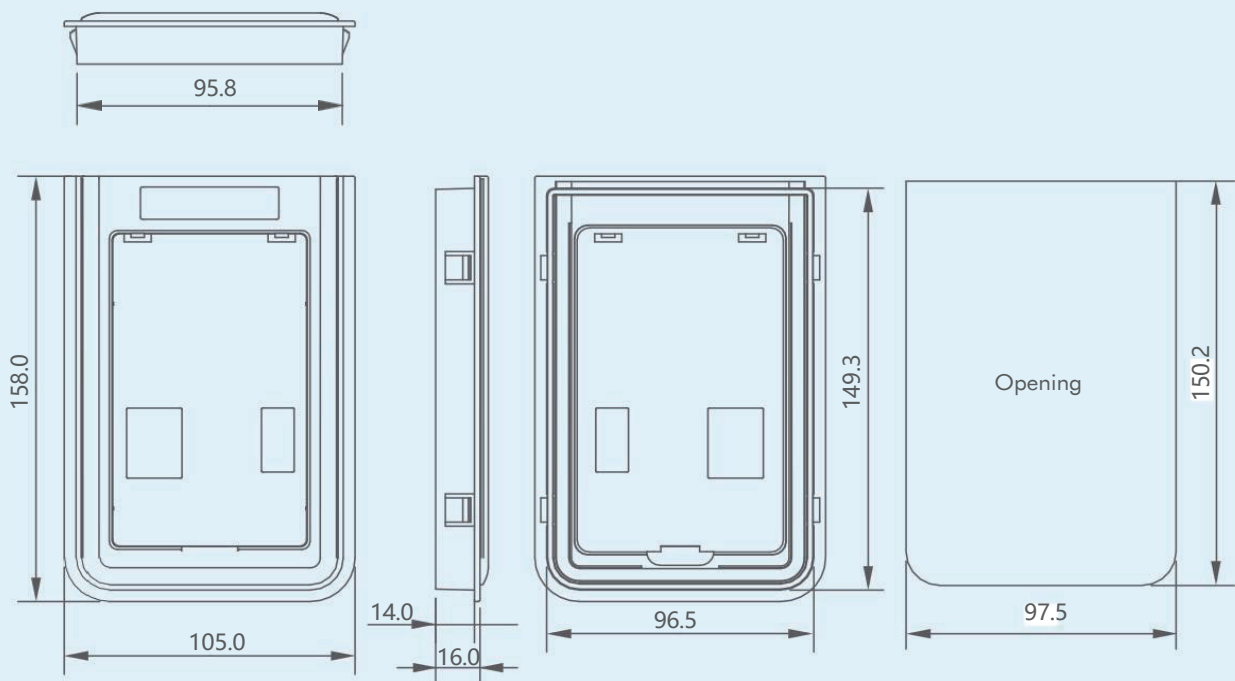
Unit: mm

Note: NJRP5- **/D4 and NJRP5- **/D6 have the same current specification and size, for example, NJRP5-30/D4 and NJRP5-30/D6

keyboard



External keypad snap



Unit: mm

SAP No	Model Description	Type	Power supply(V)	Rated current In(A)	Ordering code
G711570500000047	NJRP5-15/D4	External bypass	3 phase 200-415V	15	525295
G711570500000048	NJRP5-22/D4	External bypass	3 phase 200-415V	22	525296
G711570500000049	NJRP5-30/D4	External bypass	3 phase 200-415V	30	525297
G711570500000050	NJRP5-37/D4	External bypass	3 phase 200-415V	37	525298
G711570500000051	NJRP5-44/D4	External bypass	3 phase 200-415V	44	525299
G711570500000052	NJRP5-60/D4	External bypass	3 phase 200-415V	60	525300
G711570500000053	NJRP5-74/D4	External bypass	3 phase 200-415V	74	525301
G711570500000054	NJRP5-90/D4	External bypass	3 phase 200-415V	90	525302
G711570500000055	NJRP5-110/D4	External bypass	3 phase 200-415V	110	525303
G711570500000056	NJRP5-150/D4	External bypass	3 phase 200-415V	150	525304
G711570500000057	NJRP5-180/D4	External bypass	3 phase 200-415V	180	525305
G711570500000058	NJRP5-220/D4	External bypass	3 phase 200-415V	220	525306
G711570500000059	NJRP5-264/D4	External bypass	3 phase 200-415V	264	525307
G711570500000060	NJRP5-320/D4	External bypass	3 phase 200-415V	320	525308
G711570500000061	NJRP5-370/D4	External bypass	3 phase 200-415V	370	525309
G711570500000062	NJRP5-440/D4	External bypass	3 phase 200-415V	440	525310
G711570500000063	NJRP5-500/D4	External bypass	3 phase 200-415V	500	525311
G711570500000064	NJRP5-560/D4	External bypass	3 phase 200-415V	560	525312
G711570500000065	NJRP5-630/D4	External bypass	3 phase 200-415V	630	525313
G711570500000066	NJRP5-710/D4	External bypass	3 phase 200-415V	710	525314
G711570500000067	NJRP5-800/D4	External bypass	3 phase 200-415V	800	525315
G711570500000068	NJRP5-900/D4	External bypass	3 phase 200-415V	900	525316
G711570500000069	NJRP5-1000/D4	External bypass	3 phase 200-415V	1000	525317
G711570500000070	NJRP5-15/D6	External bypass	3 phase 200-690V	15	525318
G711570500000071	NJRP5-22/D6	External bypass	3 phase 200-690V	22	525319
G711570500000072	NJRP5-30/D6	External bypass	3 phase 200-690V	30	525320
G711570500000073	NJRP5-37/D6	External bypass	3 phase 200-690V	37	525321
G711570500000074	NJRP5-44/D6	External bypass	3 phase 200-690V	44	525322
G711570500000075	NJRP5-60/D6	External bypass	3 phase 200-690V	60	525323
G711570500000076	NJRP5-74/D6	External bypass	3 phase 200-690V	74	525324
G711570500000077	NJRP5-90/D6	External bypass	3 phase 200-690V	90	525325
G711570500000078	NJRP5-110/D6	External bypass	3 phase 200-690V	110	525326
G711570500000079	NJRP5-150/D6	External bypass	3 phase 200-690V	150	525327
G711570500000080	NJRP5-180/D6	External bypass	3 phase 200-690V	180	525328
G711570500000081	NJRP5-220/D6	External bypass	3 phase 200-690V	220	525329
G711570500000082	NJRP5-264/D6	External bypass	3 phase 200-690V	264	525330
G711570500000083	NJRP5-320/D6	External bypass	3 phase 200-690V	320	525331
G711570500000084	NJRP5-370/D6	External bypass	3 phase 200-690V	370	525332
G711570500000085	NJRP5-440/D6	External bypass	3 phase 200-690V	440	525333
G711570500000086	NJRP5-500/D6	External bypass	3 phase 200-690V	500	525334
G711570500000087	NJRP5-560/D6	External bypass	3 phase 200-690V	560	525335
G711570500000088	NJRP5-630/D6	External bypass	3 phase 200-690V	630	525336
G711570500000089	NJRP5-710/D6	External bypass	3 phase 200-690V	710	525337
G711570500000090	NJRP5-800/D6	External bypass	3 phase 200-690V	800	525338
G711570500000091	NJRP5-900/D6	External bypass	3 phase 200-690V	900	525339
G711570500000092	NJRP5-1000/D6	External bypass	3 phase 200-690V	1000	525340