



User Manual (cabinet)

TC40120N / TC40120N-B

Solutions behind the power

All rights reserved.

The information in this document is subject to change without notice.

Publish statement

Thank you for purchasing this series UPS.

This series UPS is an intelligent, single phase in single phase out, high frequency online UPS designed by our R&D team who is with years of designing experiences on UPS. With excellent electrical performance, perfect intelligent monitoring and network functions, smart appearance, complying with EMC and safety standards, The UPS meets the world' s advanced level.

Read this manual carefully before installation

This manual provides technical support to the operator of the equipment.

1 . Battery box structure :

The specification of 6-20kVA series battery box is 250*619*616mm (W*D*H) .The battery box with built-in battery cables, breaker, fuse and terminals can hold 40pcs of 12V/7Ah or 12V/9Ah batteries at most. The output voltage can be $\pm 96V$, $\pm 108V$, $\pm 120V$ by battery connection.

Two groups of batteries are connected in parallel for use, which consist of BAT+, N、BAT-. The following Fig.1 shows the overall chassis



Fig.1

2 . The battery box installation

2.1 Remove the chassis shell

Place the battery box, remove the top, front, left and right panels. Remove the top cover will be convenience for us to install the battery and connect the battery cables. As Fig.2 shows

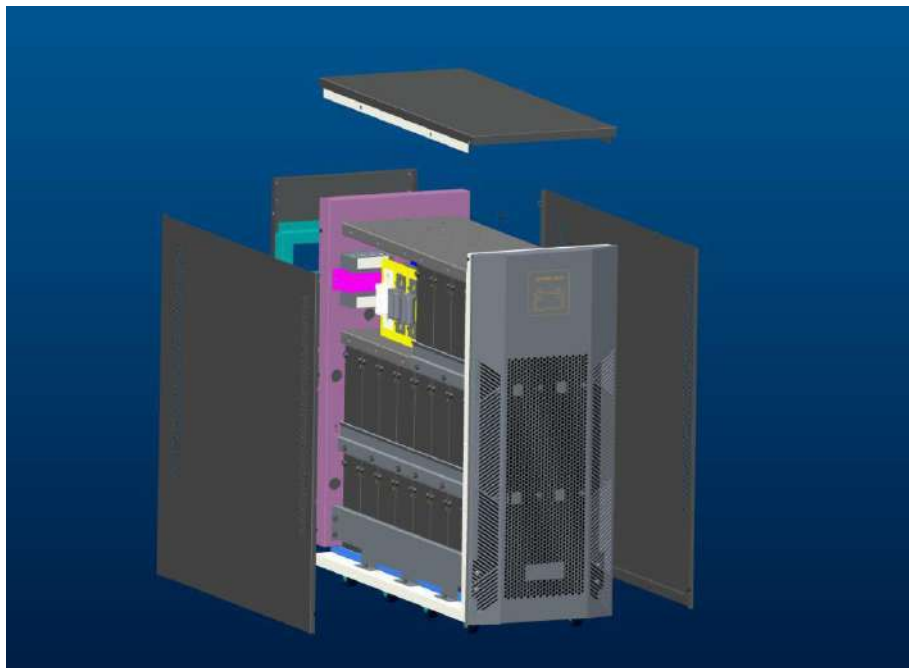


Fig.2

2.2 Battery installation and connection

40/36/32pcs of batteries can be selected to divide into two groups connected in parallel for use. Each group has 20/18/16pcs of batteries in series (BAT+ N BAT-). The installations with three types of voltages are as follows:

2.2.1 40pcs of batteries installation and connection : Place the battery from the bottom to top one by one, then connect the battery cables according to the wiring diagram as following

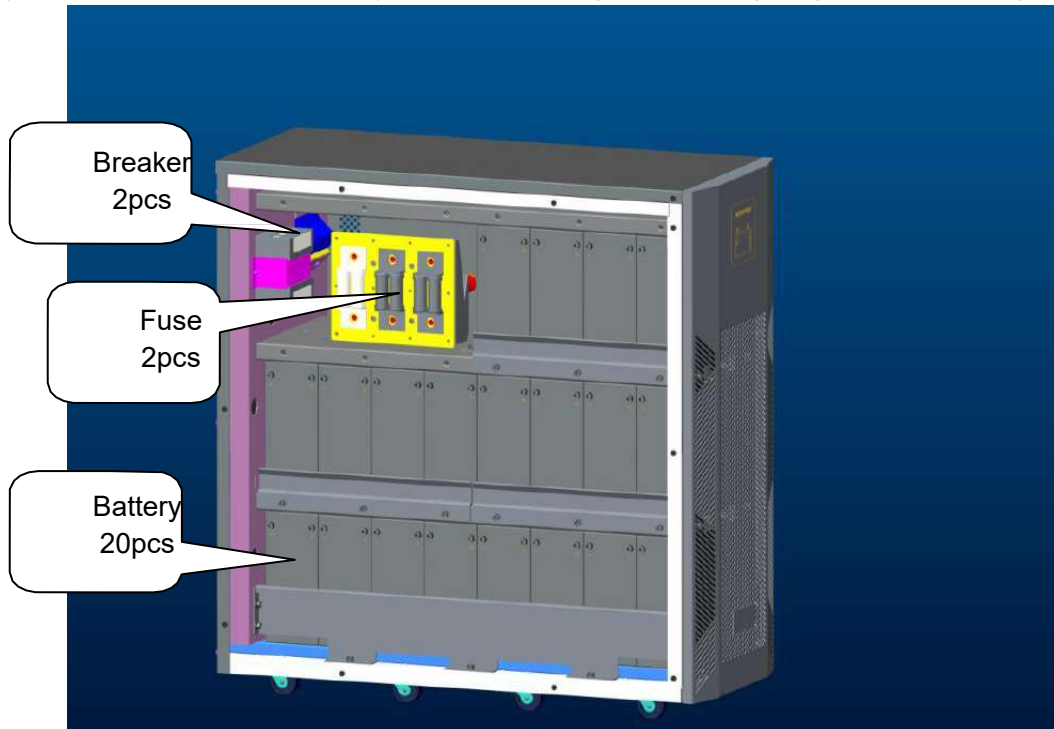


Fig.3 (Installation of 40pcs of batteries)

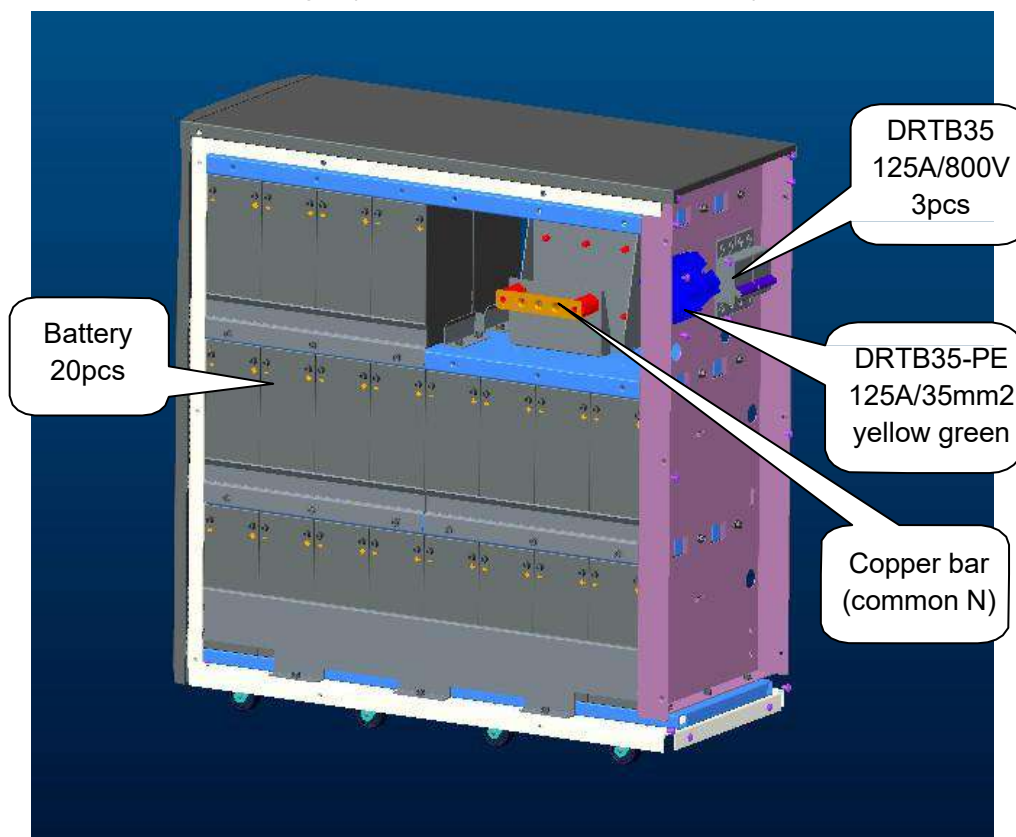
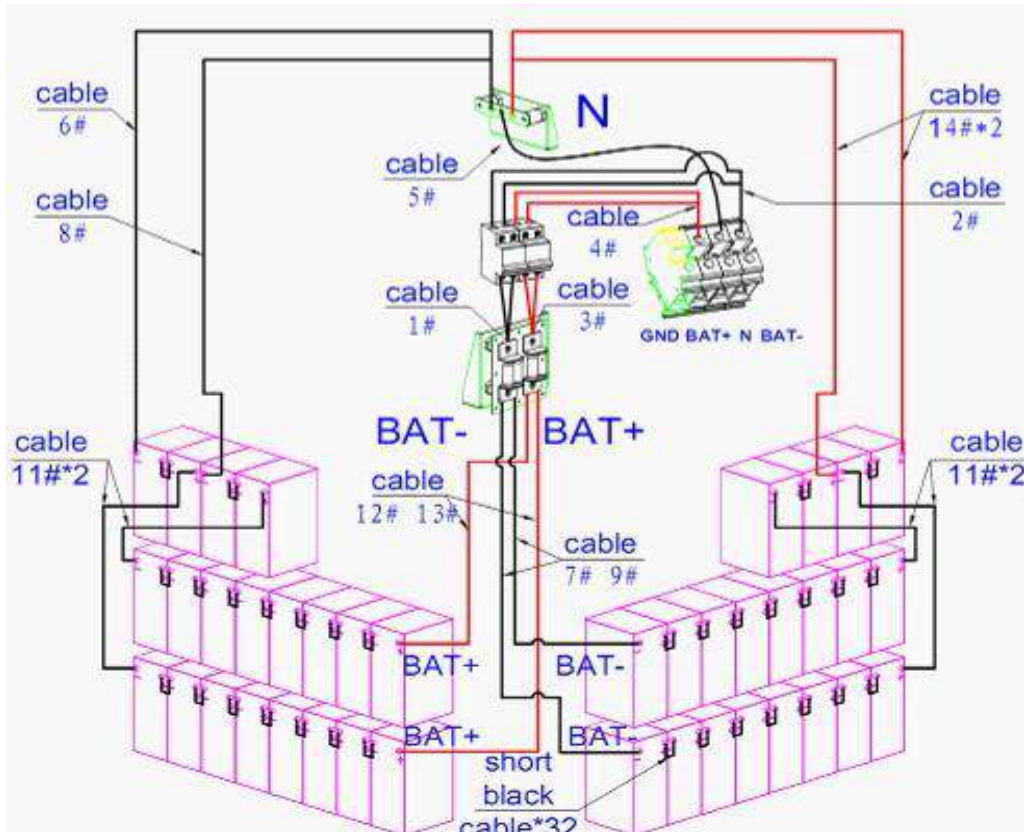


Fig.4 (Installation of 40pcs of batteries)



Wiring diagram for 40pcs of batteries installation

2.2.2 36pcs of batteries installation and connection : Place the battery from the bottom to top one by one , then connect the battery cables according to the wiring diagram as following

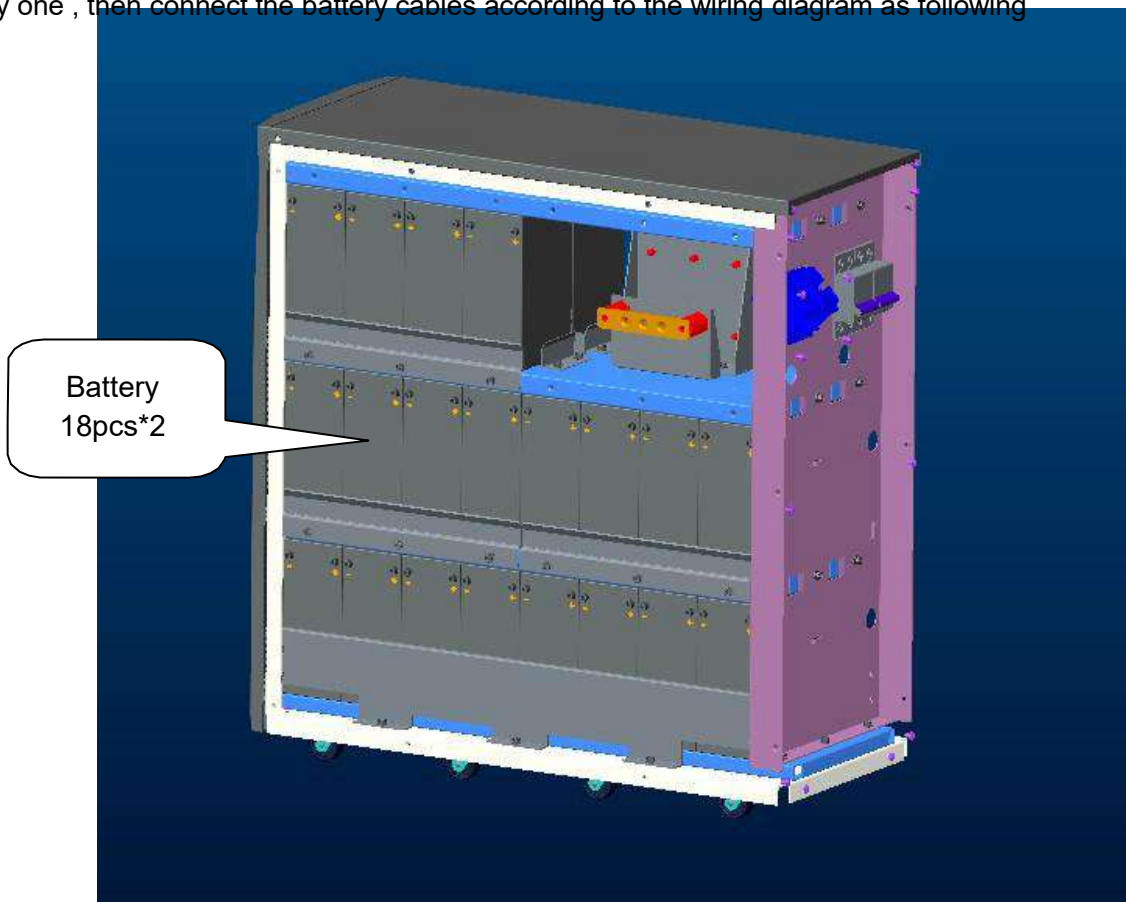
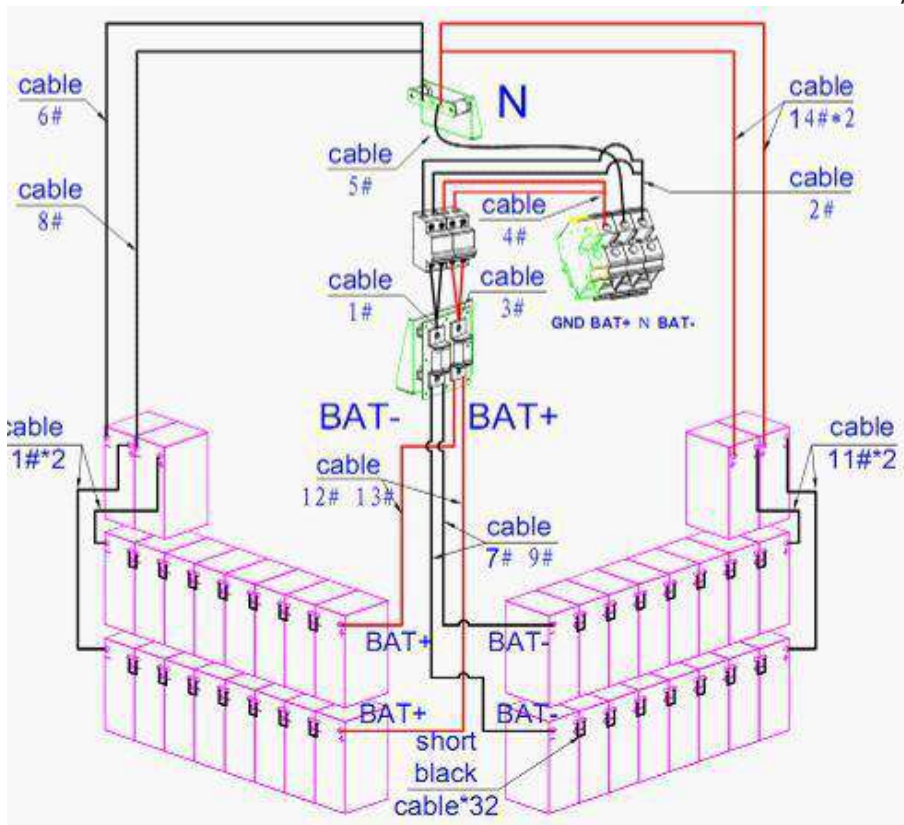


Fig.5 (Installation of 36pcs of batteries)



Wiring diagram for 36pcs of batteries installation

2.2.3 32pcs of batteries installation and connection : Place the battery from the bottom to top one by one , then connect the battery cables according to the wiring diagram as following

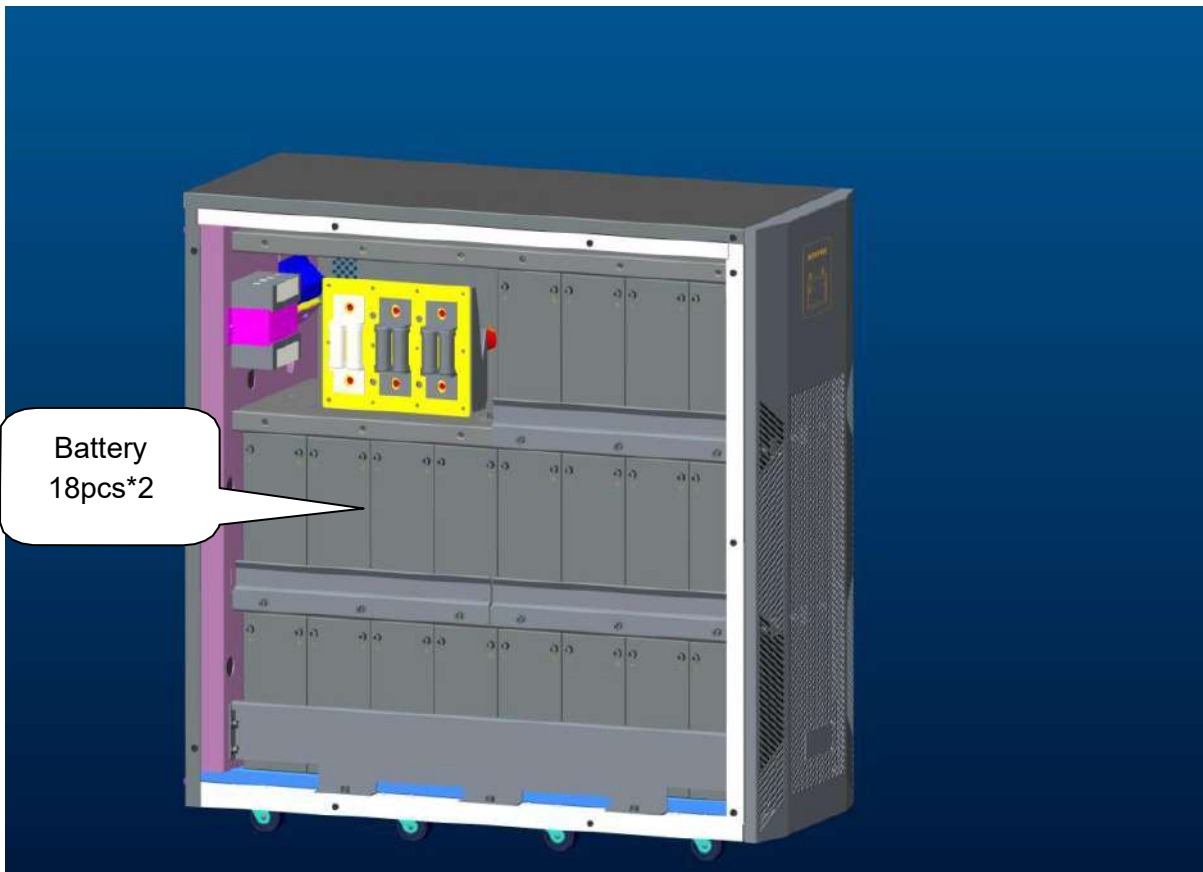
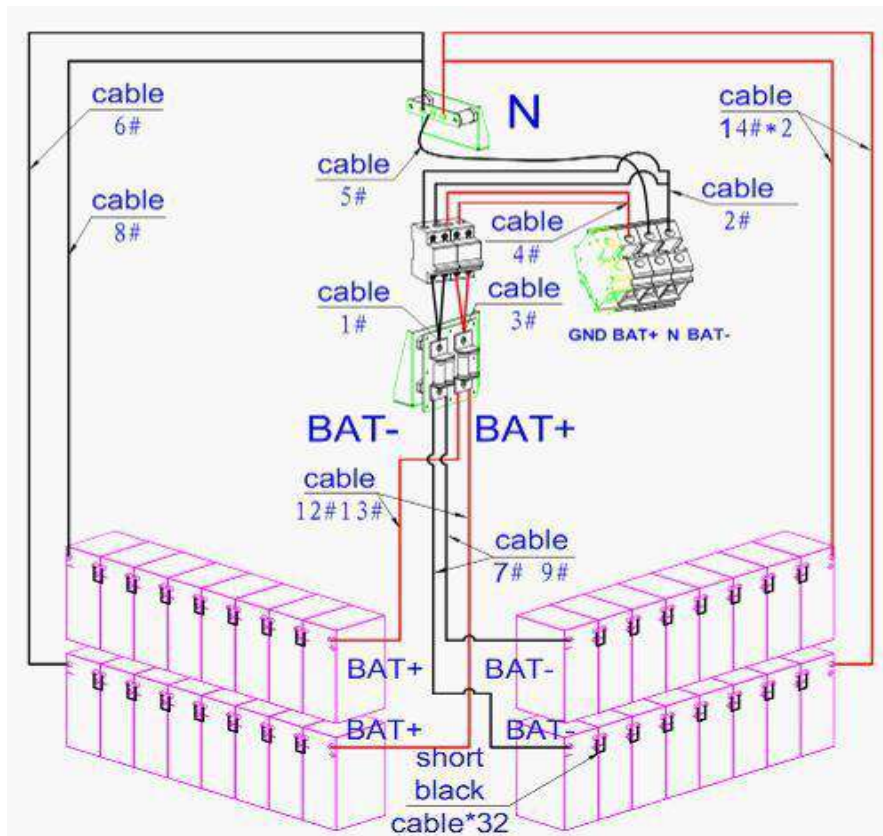


Fig.6 (Installation of 32pcs of batteries)



Wiring diagram for 32pcs of batteries installation

2.2.4 When the battery installation and connection is completed, use a multi-meter or other instrument to check if the voltages between BAT+ and N, N and BAT- are normal. If normal, lock the chassis cover.

Note : The positive and negative of battery can not be reversed or short circuit, otherwise it will damage the battery or cause some accidents. Do not touch the battery positive and negative at the same time, try to realize the single-person operation. If the battery is installed for standard UPS, 32pcs of batteries installation must be chosen.

3 . Parts list for battery box

6-20kVA battery box contains the following materials :

No.	Name	Specification	PCS	No.	Name	Specification	PCS
1	Cable 1#	300mm (black)	1	16	Breaker	NDB2Z-63 C63/2 2P 63A/440VDC	1
2	Cable 2#	150mm (black)	1	17	Cabinet	6-20K MP-BT40009	1
3	Cable 3#	300mm (red)	1	18	Fuse	120FEE 120A/690VAC	2
4	Cable 4#	200mm (red)	1	19	Connector	DRTB35 125A/800V	3
5	Cable 5#	200mm (black)	1	20	Connector	DRTB35-PE 125A/35mm2 yellow green	1
6	Cable 6#	550mm (black)	1	21	Insulated gasket	Fiberglas FR1 130°C 125*97*1.6Tmm gray	1
7	Cable 7#	500mm (black)	1	22	Insulated gasket	FR60 150°C 200*150mm transparence	1
8	Cable 8#	380mm (black)	1	23	Wiring copper bar	5 POLE	1
9	Cable 9#	240mm (black)	1				
11	Cable 11#	450mm (black)	4				
12	Cable 12#	750mm (red)	1				
13	Cable 13#	500mm (red)	1				
14	Cable 14#	620mm (red)	2				
15	Cable	65mm (black)	32				