

TWOMASTER



TWOMASTER ATS SERIES
40-6300A

I TWOMASTER Transfer Switch Selection Guide

	R	B	S	S Plus	E	Pro S	Pro E
Automatic Transfer / Auto Recovery		✓	✓	✓	✓	✓	✓
Remote Transfer	✓			✓			
Manual Transfer	✓	✓	✓	✓	✓	✓	✓
LED Power Indicator	✓	✓	✓	✓	✓	✓	✓
LED Position Indicator	✓	✓	✓	✓	✓	✓	✓
Mechanical Position Indicator	✓	✓	✓	✓	✓	✓	✓
Auxiliary Contacts	✓	✓	✓	✓	✓	✓	✓
Generator Start/Stop		✓	✓	✓	✓	✓	✓
Single Phase Sensing		✓					
Three Phase Sensing			✓	✓	✓	✓	✓
Phase Sequence Sensing			✓	✓	✓	✓	✓
Frequency Sensing			✓	✓	✓	✓	✓
Current Sensing				✓			
LCD Screen			○	○	✓	✓	✓
RS 485 Modbus Communication					✓		✓
Generator Exercise					✓		✓
Voltage Lower/Upper Limit			✓	✓	✓	✓	✓
Frequency Lower/Upper Limit			✓	✓	✓	✓	✓
Source Priority Selection			✓	✓	✓	✓	✓
Fire Alarm Input		✓	✓		✓	✓	✓

Standart : ✓
 Optional : ○



Standards :

EN IEC 60947-6-1 : 2023
 EN IEC 55014-1 : 2021
 EN IEC 55014-2 : 2021
 EN IEC 61000-3-2 : 2019 + A1 : 2021
 EN 61000-3-3 : 2013 + A2 : 2021

Approvals and certifications:

ICR Polska Co., Ltd. POLAND

	TURN R	TURN B	TURN S	TURN E	FAST B	FAST S	FAST E
Automatic Transfer / Auto Recovery		✓	✓	✓	✓	✓	✓
Remote Transfer	✓					✓	✓
Manual Transfer	✓	✓	✓	✓	✓	✓	✓
LED Power Indicator	✓	✓	✓	✓	✓	✓	✓
LED Position Indicator	✓	✓	✓	✓	✓	✓	✓
Mechanical Position Indicator	✓	✓	✓	✓	✓	✓	✓
Auxiliary Contacts	✓	✓	✓	✓	✓	✓	✓
Generator Start/Stop		✓	✓	✓		✓	✓
Single Phase Sensing		✓			✓		
Three Phase Sensing			✓	✓		✓	✓
Phase Sequence Sensing			✓	✓		✓	✓
Frequency Sensing			✓	✓		✓	✓
Current Sensing							
LCD Screen			○	✓		✓	✓
RS 485 Modbus Communication				✓			✓
Generator Exercise				✓			✓
Voltage Lower/Upper Limit			✓	✓		✓	✓
Frequency Lower/Upper Limit			✓	✓		✓	✓
Source Priority Selection			✓	✓		✓	✓
Fire Alarm Input		✓	✓	✓		✓	✓

Standart : ✓

Optional : ○


Standards :

EN IEC 60947-6-1 : 2023

EN IEC 55014-1 : 2021

EN IEC 55014-2 : 2021

EN IEC 61000-3-2 : 2019 + A1 : 2021

EN 61000-3-3 : 2013 + A2 : 2021

Approvals and certifications:

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TWOMASTER B SERIES

40A-1600A

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Product Description

Transfer Switch mainly used for electric distribution network or motor network with rated voltage 400V/ 50-60Hz, rated current 40A to 6300A, change over between main power and backup power system, power grid and genset. Meanwhile can be used as isolation of unfrequency making and breaking circuit.

It is widely used in the transmission and distribution system and automation system of the important place which not allow power cutoff such as fire-fighting, hospital, industrial facilities, bank, high building, telecommunications, school, etc.

Performance And Characteristic

It adopted double complex contact/ horizontal pulling mechanism/micro motor energy pre storage and micro-computer control technology, basically come to zero arc. Adopted reliable mechanical interlock and electric interlock, executive unit adopt independent load disconnect switch, it makes more reliable and safety; Adopt "Zero Position" technology, it can force to set to Zero Position under emergency situation (cutoff two way power supply, meet the fire linkage requirements; Load disconnect switch change over adopt singleness motor drive, switch over smooth and reliable, no noise, little impact; The driving motor have instant current across only under the load disconnect switch change over, stable working status no need to provide the working current, outstanding energy saving; Executive load disconnect switch have mechanical interlock, make sure the Normal power and Reserve Power working reliable and no interference; Distinct ON and OFF position indicator, padlock function etc., make reliable and safe isolation between power supply and loading. High security, high automatization, high reliability, long working life

Performance And Characteristic

Electromechanical integration design, accuracy change over, flexible, smoothly, adopt international advanced logical control technology, high anti-interference ability, no interference outward. Have main power ON, backup power OFF; main power OFF, backup power ON; main and backup power OFF; three working mode (I-0-II); Easy installation, control circuit adopt plug type terminal connection; Four operating functions: Emergency manual, motor remote control, emergency OFF under auto control status, auto control operation.

The solution for

- Main/Genset, Main/Main, Genset/Genset applications
- Housing projects

Compliance with standards

- IEC 60947-1
- IEC 60947-3
- IEC 60947-6-1:2023
- IEC 55014-1 : 2021
- IEC 55014-2 : 2021
- IEC 61000-3-2 : 2019 + A1 : 2021
- EN 61000-3-3 : 2013 + A2 :2021

Approvals and certifications

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Basic Type Switch Control Characteristic

Suitable for two way main and backup power system, auto change auto recovery; Can expand functions by outer connection; Auto, Remote, Manual control functions; Delay 0.5s signal detect, avoid miss actuation; Under Auto control status have "0" position remote control; Key switch select the operating mode; Can with RS-485 communication port (optional), according to customer required.

Advantages

3 or 4 Pole Automatic Transfer Switch
Automatic Transfer with Voltage Sensing (Single Phase)
Integrated Auxiliary Contacts,(Output 220VAC)
Generator Start/Stop, (No delay time)
Integrated Dual Power Supply
Integrated Bridging Bars
Fire Alarm Input, (Dry contact)
Mechanical Position Indicator
LED Position Indicator
LED Power Indicator
Wide Voltage Range
Easy integration

Product Code

TWOMASTER B Series Automatic Transfer Switches						
Rating (A)	Product Code	No. of poles	Manual Handle	Auxiliary Contact	Bridging Bars	Control Module
40	13223004	3 Pole	13200001 included	mounted	mounted	13220002 mounted
	13224004	4 Pole				
63	13223006	3 Pole				
	13224006	4 Pole				
80	13223008	3 Pole				
	13224008	4 Pole				
100	13223010	3 Pole				
	13224010	4 Pole				
125	13223012	3 Pole				
	13224012	4 Pole				
160	13223016	3 Pole				
	13224016	4 Pole				
200	13223020	3 Pole				
	13224020	4 Pole				
250	13223025	3 Pole				
	13224025	4 Pole				
315	13223031	3 Pole				
	13224031	4 Pole				
400	13223040	3 Pole				
	13224040	4 Pole				
500	13223050	3 Pole				
	13224050	4 Pole				
630	13223063	3 Pole				
	13224063	4 Pole				
800	13223080	3 Pole	13200005 included			
	13224080	4 Pole				
1000	13223100	3 Pole				
	13224100	4 Pole				
1250	13223120	3 Pole				
	13224120	4 Pole				
1600	13223160	3 Pole				
	13224160	4 Pole				

TWOMASTER S SERIES

40A-3200A

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Advantages

- 3 or 4 Pole Automatic Transfer Switch,
- **Automatic Transfer with Voltage Sensing (Three Phase),**
- LCD Screen (Optional),
- Adjustable delay time before transfer,*
- Phase Sequence Sensing,*
- Voltage Lower/Upper Limit,*
- Frequency Lower/Upper Limit,*
- Source Priority Selection,*
- Integrated Auxiliary Contacts (Output 220VAC),
- Generator Start/Stop (adjustable delay time),
- Integrated Dual Power Supply,
- Integrated Bridging Bars,
- Fire Alarm Input, (Dry contact)
- Mechanical Position Indicator,
- LED Position Indicator,
- LED Power Indicator,
- Wide Voltage Range,
- Easy integration,

*These settings can be made on the LCD screen.

The solution for

- Main/Genset, Main/Main, Genset/Genset applications
- Housing projects
- Main/Genset, Main/Main, Genset/Genset applications
- High Building
- Hospital
- Industrial Facilities
- Bank Office
- Telecommunications
- School
- Public Buildings

Compliance with standards

- IEC 60947-1
- IEC 60947-3
- IEC 60947-6-1:2023
- IEC 55014-1 : 2021
- IEC 55014-2 : 2021
- IEC 61000-3-2 : 2019 + A1 : 2021
- EN 61000-3-3 : 2013 + A2 :2021

Approvals and certification

ICR Polska Co., Ltd. POLAND



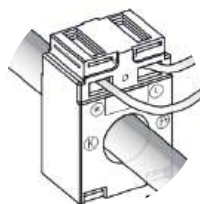
Product Code

TWOMASTER S Series Automatic Transfer Switches							
Rating (A)	Product Code	No. of poles	Manual Handle	Auxiliary contact	Bridging bars	LCD Screen	Control module
40	13233004	3 Pole	included 13200001	mounted	mounted	13230001	13230002 mounted
	13234004	4 Pole					
63	13233006	3 Pole					
	13234006	4 Pole					
80	13233008	3 Pole					
	13234008	4 Pole					
100	13233010	3 Pole					
	13234010	4 Pole					
125	13233012	3 Pole					
	13234012	4 Pole					
160	13233016	3 Pole					
	13234016	4 Pole					
200	13233020	3 Pole					
	13234020	4 Pole					
250	13233025	3 Pole					
	13234025	4 Pole					
315	13233031	3 Pole					
	13234031	4 Pole					
400	13233040	3 Pole					
	13234040	4 Pole					
500	13233050	3 Pole					
	13234050	4 Pole					
630	13233063	3 Pole					
	13234063	4 Pole					
800	13233080	3 Pole	included 13200005				
	13234080	4 Pole					
1000	13233100	3 Pole					
	13234100	4 Pole					
1250	13233120	3 Pole					
	13234120	4 Pole					
1600	13233160	3 Pole					
	13234160	4 Pole					
2000	13233200	3 Pole					
	13234200	4 Pole					
2500	13233250	3 Pole					
	13234250	4 Pole					
3200	13233320	3 Pole					
	13234320	4 Pole					

TWOMASTER S PLUS SERIES

40A-3200A

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Advantages

- 3 or 4 Pole Automatic Transfer Switch
- Automatic Transfer with Voltage Sensing (Three Phase)
- LCD Screen (Optional)
- Adjustable delay time before transfer
- **Current Sensing**
 - Phase Sequence Sensing
 - Voltage Lower/Upper Limit
 - Frequency Lower/Upper Limit
 - Source Priority Selection
- Integrated Auxiliary Contacts (Output 220VAC)
- Generator Start/Stop (adjustable delay time)
- Integrated Dual Power Supply
- Integrated Bridging Bars
- Fire Alarm Input, (Dry contact)
- Mechanical Position Indicator
- LED Position Indicator
- LED Power Indicator
- Wide Voltage Range
- Easy integration

*These settings can be made on the LCD screen.

The solution for

- Main/Genset, Main/Main, Genset/Genset applications
- High Building
- Hospital
- Industrial Facilities
- Bank Office
- Telecommunications
- School
- Public Buildings

Compliance with standards

- IEC 60947-1
- IEC 60947-3
- IEC 60947-6-1:2023
- IEC 55014-1 : 2021
- IEC 55014-2 : 2021
- IEC 61000-3-2 : 2019 + A1 : 2021
- EN 61000-3-3 : 2013 + A2 :2021

Approvals and certification

ICR Polska Co., Ltd. POLAND



Product Code

TWOMASTER S Plus Series Automatic Transfer Switches							
Rating (A)	Product Code	No. of poles	Manual Handle	Auxiliary contact	Bridging bars	LCD Screen	Control module
40	13243004	3 Pole	included 13200001	mounted	mounted	13230001	13240002 mounted
	13244004	4 Pole					
63	13243006	3 Pole					
	13244006	4 Pole					
80	13243008	3 Pole					
	13244008	4 Pole					
100	13243010	3 Pole					
	13244010	4 Pole					
125	13243012	3 Pole					
	13244012	4 Pole					
160	13243016	3 Pole					
	13244016	4 Pole					
200	13243020	3 Pole					
	13244020	4 Pole					
250	13243025	3 Pole					
	13244025	4 Pole					
315	13243031	3 Pole					
	13244031	4 Pole					
400	13243040	3 Pole					
	13244040	4 Pole					
500	13243050	3 Pole					
	13244050	4 Pole					
630	13243063	3 Pole					
	13244063	4 Pole					
800	13243080	3 Pole	included 13200005				
	13244080	4 Pole					
1000	13243100	3 Pole					
	13244100	4 Pole					
1250	13243120	3 Pole					
	13244120	4 Pole					
1600	13243160	3 Pole					
	13244160	4 Pole					
2000	13243200	3 Pole					
	13244200	4 Pole					
2500	13243250	3 Pole					
	13244250	4 Pole					
3200	13243320	3 Pole					
	13244320	4 Pole					

TWOMASTER E SERIES

40A-3200A

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Advantages

- 3 or 4 Pole Automatic Transfer Switch,
- **Automatic Transfer with Voltage Sensing (Three Phase),**
- **RS 485 Modbus Haberleşme**
- LCD Screen
- Adjustable delay time before transfer,*
- Phase Sequence Sensing,*
- Voltage Lower/Upper Limit,*
- Frequency Lower/Upper Limit,*
- Source Priority Selection,*
- Integrated Auxiliary Contacts (Output 220VAC),
- Generator Start/Stop (adjustable delay time),
- Integrated Dual Power Supply,
- Integrated Bridging Bars,
- Fire Alarm Input, (Dry contact)
- Mechanical Position Indicator,
- LED Position Indicator,
- LED Power Indicator,
- Wide Voltage Range,
- Easy integration,

*These settings can be made on the LCD screen.

The solution for

- Main/Genset, Main/Main, Genset/Genset applications
- Housing projects
- Main/Genset, Main/Main, Genset/Genset applications
- High Building
- Hospital
- Industrial Facilities
- Bank Office
- Telecommunications
- Data Center
- Public Buildings

Compliance with standards

- IEC 60947-1
- IEC 60947-3
- IEC 60947-6-1:2023
- IEC 55014-1 : 2021
- IEC 55014-2 : 2021
- IEC 61000-3-2 : 2019 + A1 : 2021
- EN 61000-3-3 : 2013 + A2 :2021

Approvals and certification

ICR Polska Co., Ltd. POLAND



Product Code

TWOMASTER E Series Automatic Transfer Switches							
Rating (A)	Product Code	No. of poles	Manual Handle	Auxiliary contact	Bridging bars	LCD Screen	Control module
40	13253004	3 Pole	included 13200001	mounted	mounted	included 13230001	13250002 mounted
	13254004	4 Pole					
63	13253006	3 Pole					
	13254006	4 Pole					
80	13253008	3 Pole					
	13254008	4 Pole					
100	13253010	3 Pole					
	13254010	4 Pole					
125	13253012	3 Pole					
	13254012	4 Pole					
160	13253016	3 Pole					
	13254016	4 Pole					
200	13253020	3 Pole					
	13254020	4 Pole					
250	13253025	3 Pole					
	13254025	4 Pole					
315	13253031	3 Pole					
	13254031	4 Pole					
400	13253040	3 Pole					
	13254040	4 Pole					
500	13253050	3 Pole					
	13254050	4 Pole					
630	13253063	3 Pole					
	13254063	4 Pole					
800	13253080	3 Pole	included 13200005				
	13254080	4 Pole					
1000	13253100	3 Pole					
	13254100	4 Pole					
1250	13253120	3 Pole					
	13254120	4 Pole					
1600	13253160	3 Pole					
	13254160	4 Pole					
2000	13253200	3 Pole					
	13254200	4 Pole					
2500	13253250	3 Pole					
	13254250	4 Pole					
3200	13253320	3 Pole					
	13254320	4 Pole					

TWOMASTER R SERIES

40A-6300A

TWOMASTER


The solution for

- Main/Genset, Main/Main, Genset/Genset applications
- Generator manufacturers

Compliance with standards

- IEC 60947-1
- IEC 60947-3
- IEC 60947-6-1:2023
- IEC 55014-1 : 2021
- IEC 55014-2 : 2021
- IEC 61000-3-2 : 2019 + A1 : 2021
- EN 61000-3-3 : 2013 + A2 :2021

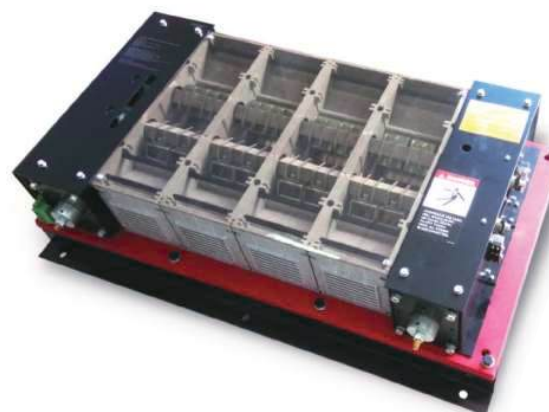
Approvals and certification

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Advantages

- 3 or 4 Pole Motorized Transfer Switch
- Remote Transfer Switch
- Integrated Auxiliary Contacts
- Integrated Dual Power Supply
- Integrated Bridging Bars
- Mechanical Position Indicator
- LED Position Indicator
- LED Power Indicator
- Wide Voltage Range
- Easy integration



TWOMASTER R Series 4000-5000-6300A

Product Code

TWOMASTER R Series Remote Transfer Switches							
Rating (A)	Product Code	No. of poles	Manual Handle	Auxiliary contact	Bridging bars	Control module	Automatic Control Unit
40	13273004	3 Pole	included 13200001	mounted	mounted	13270002 mounted	Analog 13270001 Digital 13270004
	13274004	4 Pole					
63	13273006	3 Pole					
	13274006	4 Pole					
80	13273008	3 Pole					
	13274008	4 Pole					
100	13273010	3 Pole					
	13274010	4 Pole					
125	13273012	3 Pole					
	13274012	4 Pole					
160	13273016	3 Pole					
	13274016	4 Pole					
200	13273020	3 Pole					
	13274020	4 Pole					
250	13273025	3 Pole					
	13274025	4 Pole					
315	13273031	3 Pole					
	13274031	4 Pole					
400	13273040	3 Pole					
	13274040	4 Pole					
500	13273050	3 Pole					
	13274050	4 Pole					
630	13273063	3 Pole					
	13274063	4 Pole					
800	13273080	3 Pole	included 13200005				
	13274080	4 Pole					
1000	13273100	3 Pole					
	13274100	4 Pole					
1250	13273120	3 Pole					
	13274120	4 Pole					
1600	13273160	3 Pole					
	13274160	4 Pole					
2000	13273200	3 Pole					
	13274200	4 Pole					
2500	13273250	3 Pole					
	13274250	4 Pole					
3200	13273320	3 Pole					
	13274320	4 Pole					
4000	13273400	3 Pole	included 13200006				
	13274400	4 Pole					
5000	13273500	3 Pole					
	13274500	4 Pole					
6300	13273630	3 Pole					
	13274630	4 Pole					

TWOMASTER ATS SERIES
40A-6300A



Technical Parameter

Rated Thermal Current Ith		100A				160A		250A		630A			
Rated Current In(A)		40	63	80	100	125	160	200	250	315	400	500	630
Rated insulation voltage Ui(V)		500	500	500	500	500	500	500	500	500	500	500	500
Dielectric strength (V)		5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000
Rated impulse withstand voltage Uimp KV (installation category)		8	8	8	8	8	8	8	8	12	12	12	12
Rated working current Ie(A)	AC-33iB	40	63	80	100	125	160	200	250	315	400	500	630
Rated short time withstand current Icw (kA Rms)	0.1S / 1S	9/5	9/5	9/5	9/5	12/5	12/5	12/5	12/5	40/20	40/20	40/20	50/25
Rated Breaking capacity (A Rms) AC-33iB 400V		320	500	640	800	1000	1280	1600	2000	3200	3200	3200	5000
Rated Making capacity (A Rms) AC-33iB 400V		400	630	800	1000	1250	1600	2000	2500	4000	4000	4000	6300
Transfer Time	I-O-II (S)	0.5	0.5	0.5	0.5	1	1	1.1	1.1	1.2	1.2	1.2	1.2
	O-I or II-O (S)	0.3	0.3	0.3	0.3	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.8
Weight (kg)	3Poles	3,25	3,25	3,25	3,25	6,1	6,1	8,82	8,82	17.8	17.8	17.8	17.8
	4Poles	3,34	3,34	3,34	3,34	6,3	6,3	9,22	9,22	18,7	18,7	18,7	18,7
Use categeory		AC-32B(PC)											

Technical Parameter

Rated Thermal Current I _{th}		1000A		1250A	1600A	2000A	2500A	3200A
Rated Current I _n (A)		800	1000	1250	1600	2000	2500	3200
Rated insulation voltage U _i (V)		500	500	500	500	1000	1000	1000
Dielectric strength (V)		10000	10000	10000	10000	10000	10000	10000
Rated impulse withstand voltage U _{imp} KV (installation category)		12	12	12	12	12	12	12
Rated working current I _e (A)	AC-33iB	800	1000	1250	1600	2000	2500	3200
Rated short time withstand current I _{cw} (kA Rms)	0.1S/1 S	90/50	90/50	90/50	90/50	50	50	55
Rated Breaking capacity (A Rms) AC-33iB 400V		6400	8000	10000	12800	16000	20000	25600
Rated Making capacity (A Rms) AC-33iB 400V		8000	10000	12500	16000	20000	25000	32000
Transfer Time	I-0-II (S)	1.2	1.2	1.2	1.2	2.4	2.4	2.4
	0-I or II-0 (S)	0.8	0.8	0.8	0.8	1.6	1.6	1.6
Weight (kg)	3Poles	42,3	42,3	42,9	44,2	78	87	114
	4Poles	46,3	46,3	50,9	51,2	99	114	127
Use categeory		AC-32B(PC)						

TWOMASTER ATS SERIES

40A-6300A

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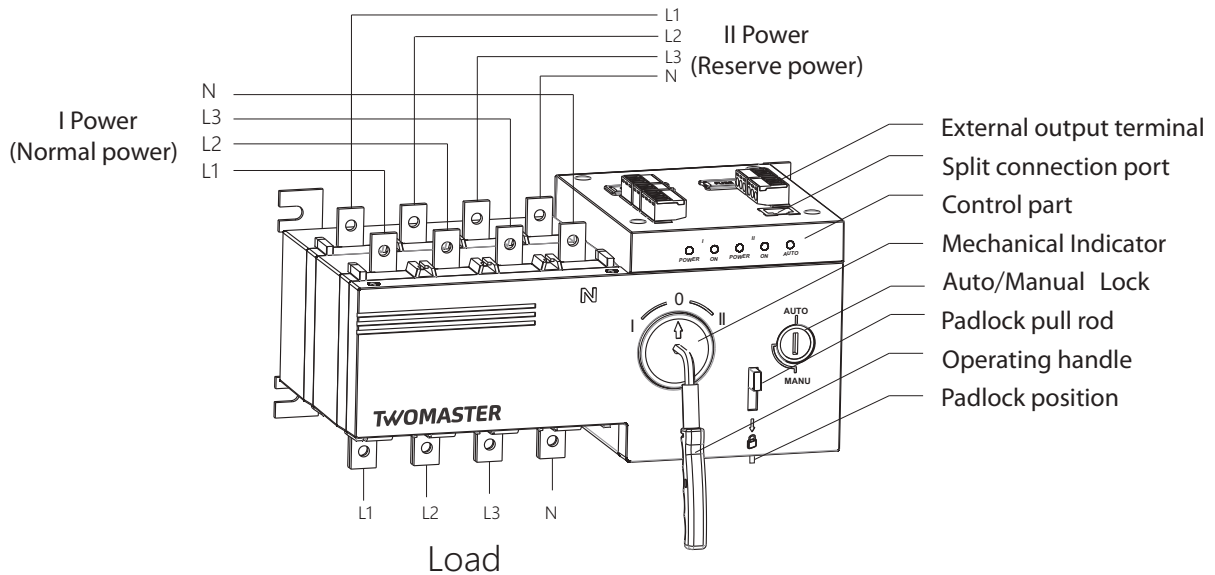
Technical Parameter

Rated Current In		4000A		5000A		6300A	
Insulation voltage		AC800V					
Impulse withstand voltage		8kA					
Rated voltage		AC400V					
Vote count		Double throw					
Wiring		After the board (Front panel for special delivery)					
Poles		3P	4P	3P	4P	3P	4P
Weight (kg)		207	212	265	275		
Operating current (A)	DC110V/125V	32	36	36	38	36	38
	AC100V/110V	32	36	36	38	36	38
	AC200V/ 220V/230V	16	18	18	20	18	20
Tripping current (A)	DC110V/125V	6					
	AC100V/110V	6					
	AC220V	2					
Performance	Short time withstand current		50kA				
	Rated conditional short-circuit current (fuse for protection)		120kA				
	Rated conditional short-circuit current (fuse for Breaker)		50kA				
	Breaking capacity		AC-33B(10IeConnect/10IeBreaking) cosΦ = 0.35 DC-33B(4IeConnect.4IeBreaking) L/R = 2.5ms				
	Time Conversion	I-II	≤0.2s				
		II-I					
	Lifetime		Electrical life of 6,000 times, the mechanical life of 10,000 times				
Operating cycle frequency		120 times / hour					
Auxiliary switch		A, B power supply side are two normally open and two normally closed; switching capacity AC: 110V5A / AC: 220V3A DC: 200V0.2A					
Accessory		Operating handle					

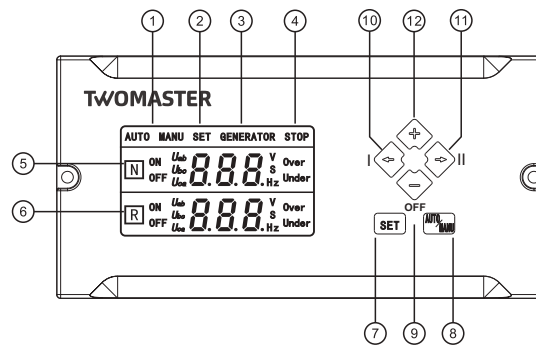
Note:

- 1) Direct current (DC) case operation, AC circuit and configured substantially the same. Please go to follow the exchange operating instructions.
- 2) The weight of the table for reference purposes only.
- 3) Short-time withstand current and operating current, the current value of the trip is for reference only.
- 4) 4000A and 5000A 4P product, N-pole contacts capacity are 2000A, 2500A.

ATS Wiring Instruction
Frame Current 40A - 3200A



Keyboards guide



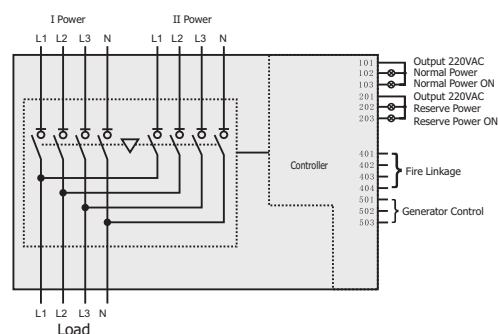
- 1- AUTO/MANU working status indicator
- 2- SET entry setting menu indicator
- 3- GEN generator start working status indicator
- 4- STOP fire linkage working status indicator (force transfer to double off working position)
- 5- Source I voltage, frequency display
- 6- Source II voltage, frequency display
- 7- SET key, press entry setting interface, on SET menu, press is confirm the settings.
- 8- AUTO/MANU key to select transfer mode. AUTO is auto transfer, MANU is manual transfer. On SET menu, press to save the settings and exit.
- 9- On manual working mode and when either source I/II is available, press key transfer to double off working position; on SET menu, is turn down key.
- 10- On manual working mode and when source I is available, press key transfer to source I supply, on SET menu, is scroll up key.
- 11- On manual working mode and when source II is available, press key transfer to source II supply, on SET menu, is scroll down key.
- 12- On setting menu, press to turn up)

TWOMASTER ATS SERIES

40A-6300A

TWOMASTER

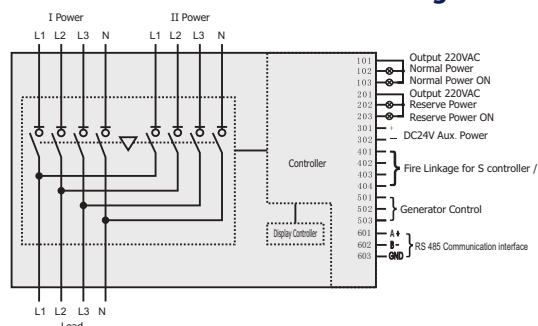
TWOMASTER-B Controller 4P Wiring



Twomaster-B Controller terminal wiring instruction

- 101~103 : Main Power external Indicator signal output (Active AC230V 0.5A)
- 101—Indicator common null line and 3P null line input
- 102—Main power indicator signal output
- 103—Main power ON signal output
- 201~203 : Backup power external indicator signal (Active AC230V/0. 5A)
- 201—Indicator common null line and 3P null line input
- 202—Backup power indicator signal output
- 203—Backup power ON signal output
- 401~404 fire linkage control signal input and feedback signal output
- 401,402— Fire linkage signal passive input,
- 403,404— Feedback signal when ATS transfer to OFF position
- 501~503 : Generator start control signal output
- 501—Control signal NC point
- 502—Control signal common point
- 503—Control signal NO point

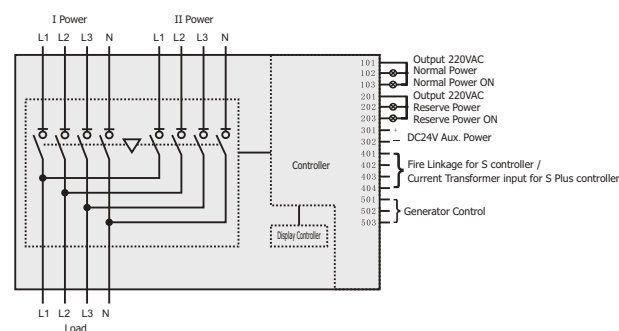
TWOMASTER-E Controller 4P Wiring



Twomaster-E Controller terminal wiring instruction

- 101~103 : Main Power external Indicator signal output (Active AC230V 0.5A)
- 101—Indicator common null line and 3P null line input
- 102—Main power indicator signal output
- 103—Main power ON signal output
- 201~203 : Backup power external indicator signal (Active AC230V/0. 5A)
- 201—Indicator common null line and 3P null line input
- 202—Backup power indicator signal output
- 203—Backup power ON signal output
- 301~302 aux. power DC24V input
- 301--DC24V "+" input
- 302- DC24V "-" input
- 401~404 fire linkage control signal input and feedback signal output
- 401,402— Fire linkage signal passive input,
- 403,404— Feedback signal when ATS transfer to OFF position
- 501~503 : Generator start control signal output
- 501—Control signal NC point
- 502—Control signal common point
- 503—Control signal NO point
- 601~603: RS485 Communication terminal 601--A+, 602- B-, 603—GND

TWOMASTER-S & S Plus Controller 4P Wiring



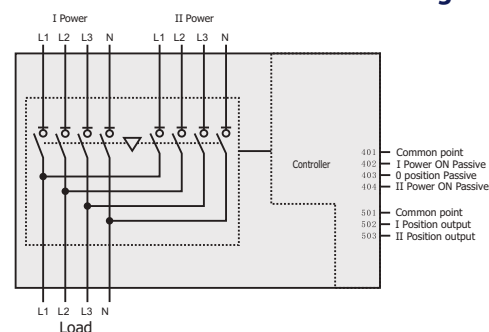
Twomaster-S Controller terminal wiring instruction

- 101~103 : Main Power external Indicator signal output (Active AC230V 0.5A)
- 101—Indicator common null line and 3P null line input
- 102—Main power indicator signal output
- 103—Main power ON signal output
- 201~203 : Backup power external indicator signal (Active AC230V/0. 5A)
- 201—Indicator common null line and 3P null line input
- 202—Backup power indicator signal output
- 203—Backup power ON signal output
- 301~302 aux. power DC24V input
- 301--DC24V "+" input
- 302- DC24V "-" input
- 401~404 fire linkage control signal input and feedback signal output
- 401,402— Fire linkage signal passive input,
- 403,404— Feedback signal when ATS transfer to OFF position
- 501~503 : Generator start control signal output
- 501—Control signal NC point
- 502—Control signal common point
- 503—Control signal NO point

S Plus Controller terminal wiring instruction

- 401~404 current signal input, 100mA

TWOMASTER-R Controller 4P Wiring



Twomaster-R Controller terminal wiring instruction

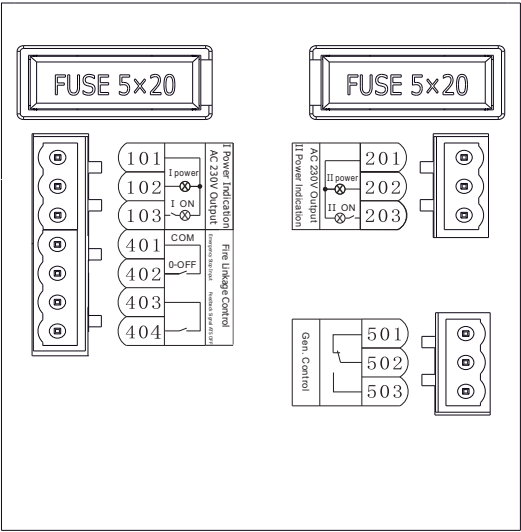
- 401~404 Remote control signal input
- 401— Common point
- 402— I Power ON passive input
- 403— 0 position passive input
- 404— II Power ON passive input
- 501~503 : Position signal output
- 501—Common point
- 502—I Position passive signal output
- 503—II Position passive signal output

Note: 1. If fire-fighting equipment output signal is active power, the signal source need to change over the line connection, for example to connect through a relay to change the line connection, and connect the relay NO point to 401,402, when NO contact point closed ATS transfer to OFF position. When the fire linkage function is active, the ATS will stop working, if want the ATS to working again, must first clear up the fire-fighting signal and then the ATS will recovery normal operation. If it is intelligent type, need switching Manual/Auto button one time.

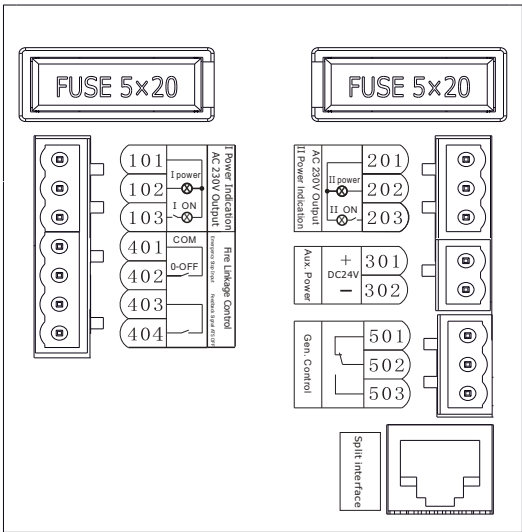
2. When the backup power is Auto start generator, when normal power is good 501 and 502 closed, 502 and 503 open; When Normal power is fault, 501 and 502 open, 502 and 503 closed.

3. RS485 Communication interface manual please refer to communication protocol.

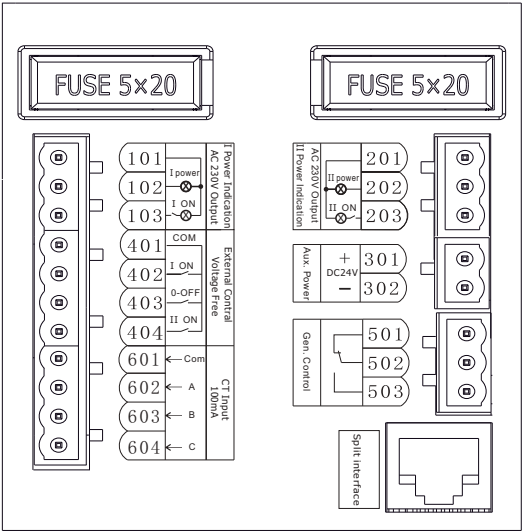
TWOMASTER-B Controller Terminal Definition
40A-1600A



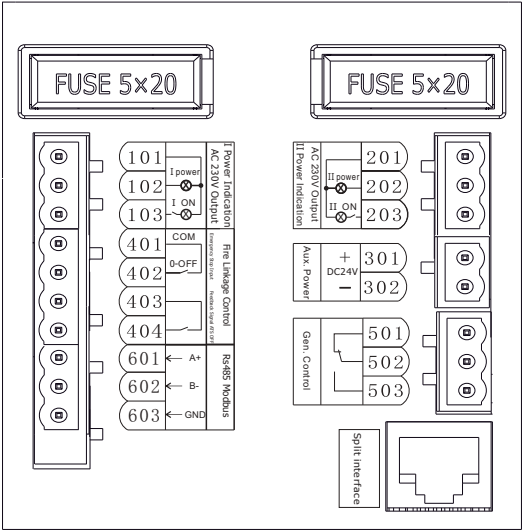
TWOMASTER-S Controller Terminal Definition
40A-3200A



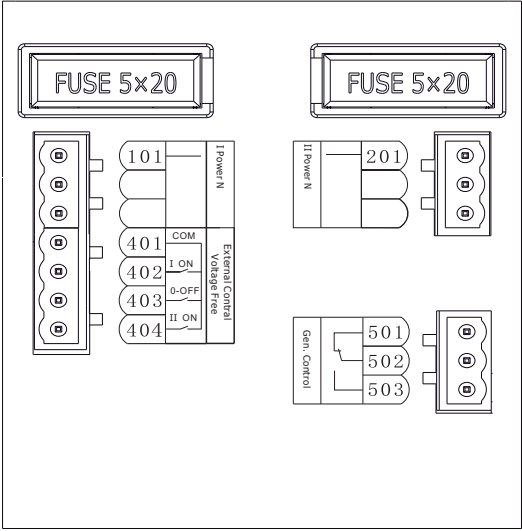
TWOMASTER-S Plus Controller Terminal Definition
40A-3200A



TWOMASTER-E Controller Terminal Definition
40A-3200A



TWOMASTER-R Controller Terminal Definition
40A-1600A



TWOMASTER ATS SERIES

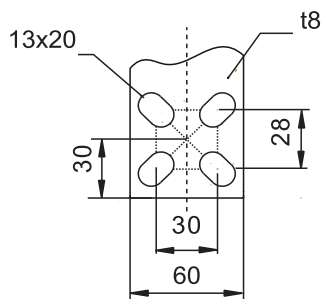
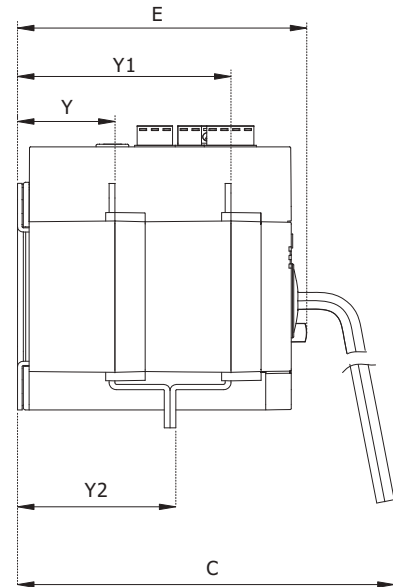
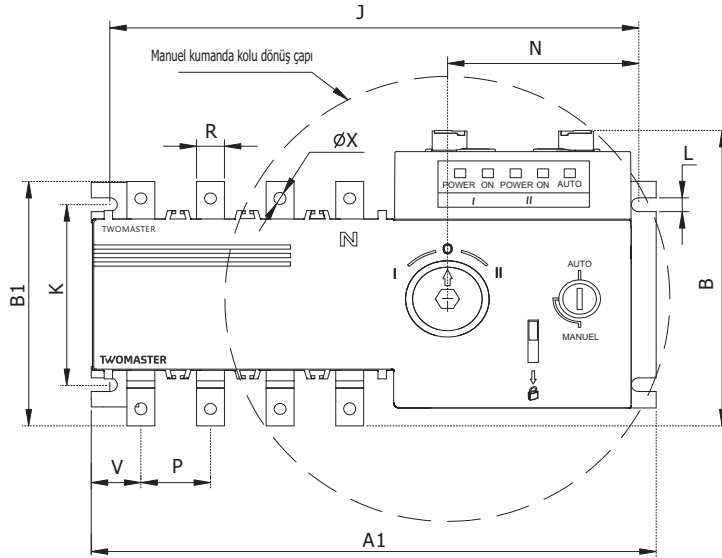
40A-6300A



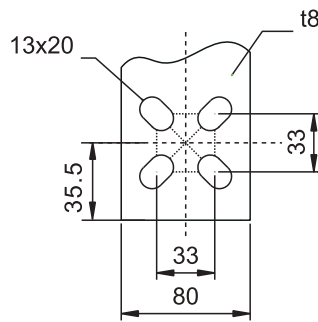
TWOMASTER-R Controller Terminal Definition

2000A-3200A

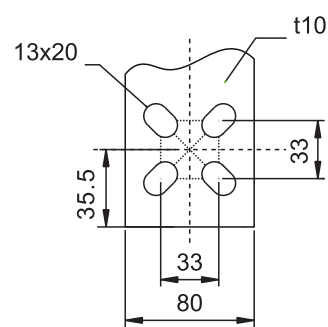
Output Terminal Wiring	Inner wiring	Terminal
	Device inner output	
	Control	
	Position Indicate	
	the 1st pre-break Aux. contact	
	Mode Padlock	



800-1000A



1250A



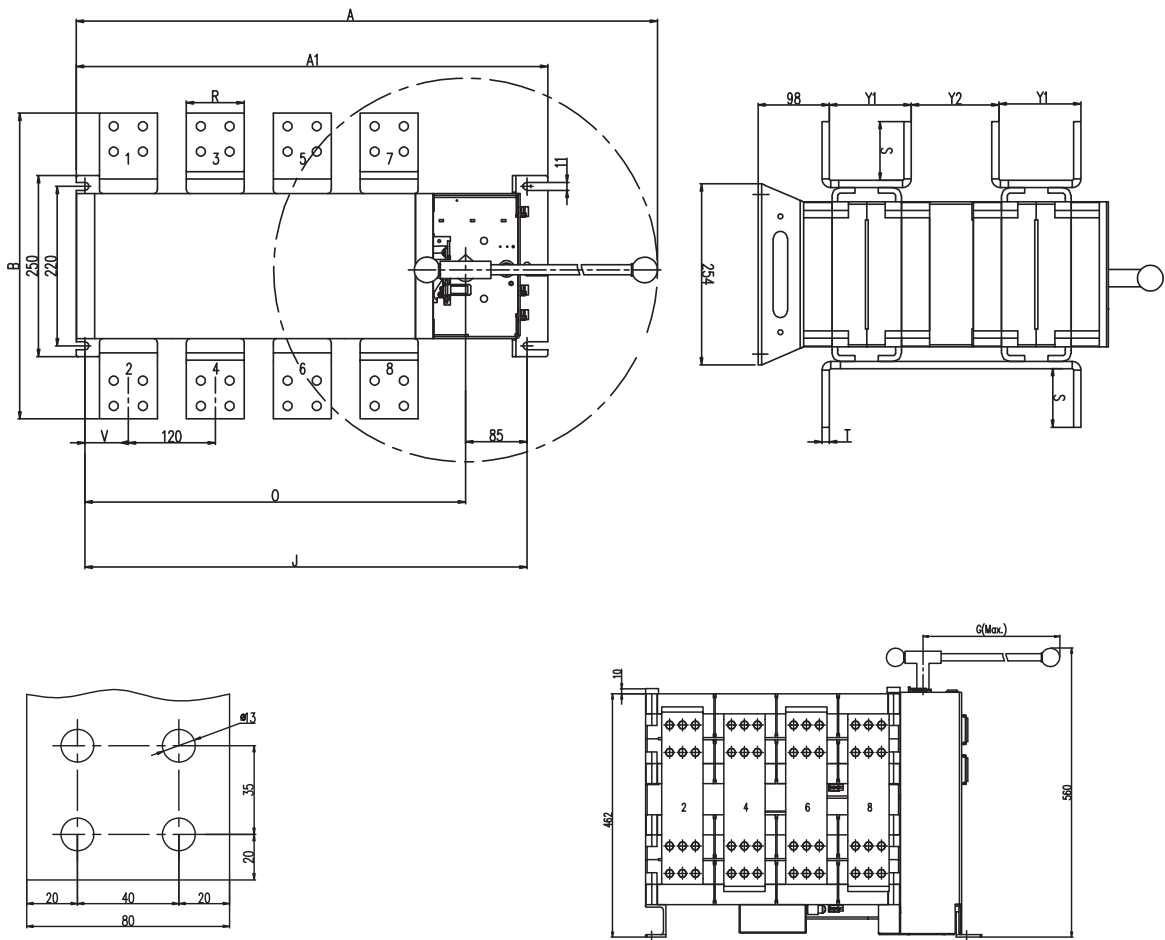
1600A

Size	Overall Dimension(mm)					Mounting Dimension (mm)											
In	A1	B	B1	C	E	J	K	L	N	P	R	V	ΦX	Y	Y1	Y2	t
100	244	142	123	165	125	228	85	6.5	83	30	14	21	6.5	41.5	91.5	43	2.5
160	301	175	140	200	166	285	102	7	94	36	20	31	8.5	55.5	125.5	92.5	3.5
250	373	175	178	250	198	350	108	6.5	105	50	24	37	11	72	157	116	3.5
630	433	260	260	295	244	416	180	9	101	65	40	47.5	12	83	193	140	5
1000	636	366	355	373	320	612	220	11	83.5	120	60	71	13	109	241	105	8
1250	636	366	369	373	320	612	220	11	83.5	120	80	71	13	109	241	106	8
1600	636	366	369	373	320	612	220	11	83.5	120	80	71	13	109	241	106	10

TWOMASTER ATS SERIES
40A-6300A

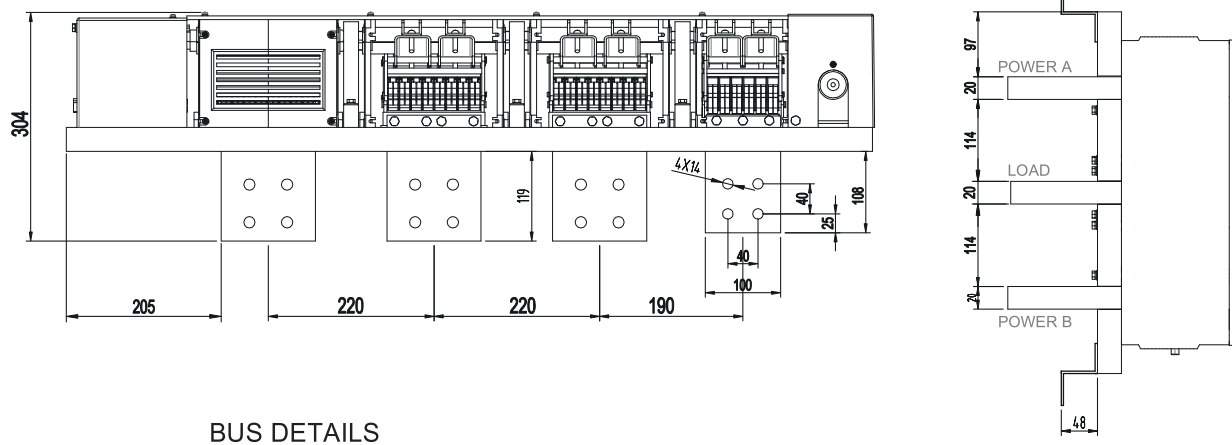
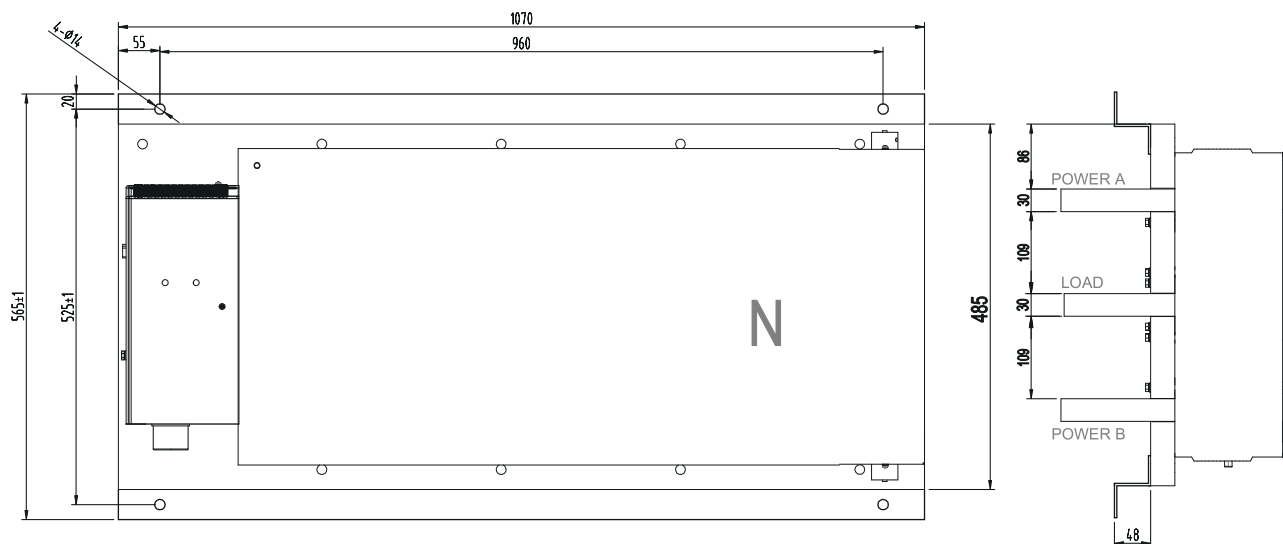


Diemensions
2000A-3200A

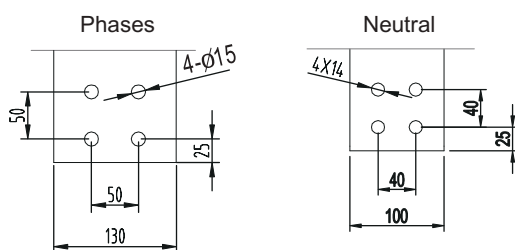


2000A, 2500A, 3200A

	Overall Dimension(mm)			Mounting Dimension (mm)						
Size	A1	B	G	J	R	S	T	V	Y1	Y2
2000/3P	537	423	360	496	80	81	10	56	113	121
2000/4P	651	423	540	610	80	81	10	60	113	121
2500/3P	537	433	360	496	80	81	15	56	118	116
2500/4P	651	433	540	610	80	81	15	60	118	116
3200/3P	537	443	360	496	80	81	20	56	121	111
3200/4P	651	443	540	610	80	81	20	60	121	111



BUS DETAILS



Panel board safety distance:

S1 Dimension: 50mm(400V),100mm(690V)

S2 Dimension: 560mm(400V),600mm(690V)

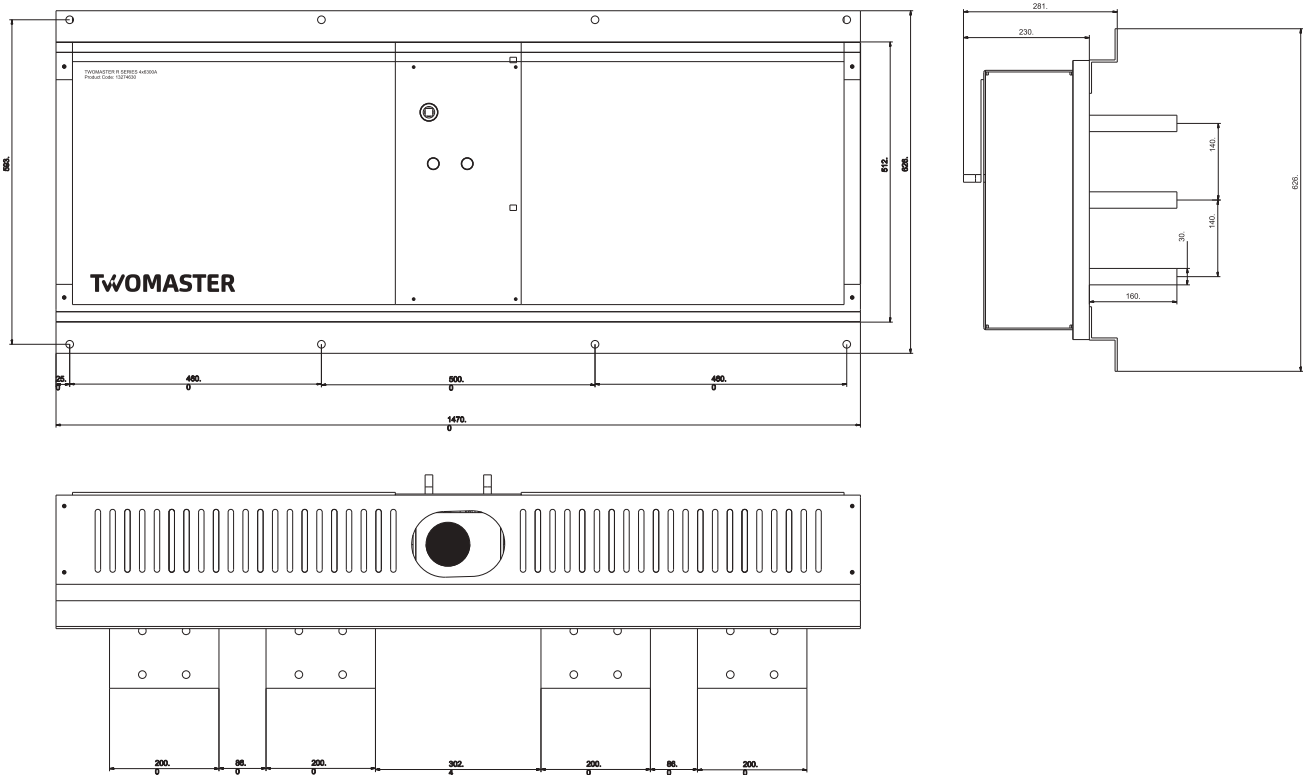
TWOMASTER ATS SERIES

40A-6300A



Diemensions

6300A



TWOMASTER Automatic Control Unit



13270001
Analog

13270004
Digital

Automatic Transfer / Auto Recovery	√	√
Manual Transfer on Control Unit		√
LED Power Indicator	√	√
LED Position Indicator		√
Generator Start/Stop		√
Three Phase Sensing	√	√
Phase Sequence Sensing	√	√
Current Sensing		√
Frequency Sensing	√	√
Voltage Lower/Upper Limit	√	√
Frequency Lower/Upper Limit		√
Current Lower/Upper Limit		√
LCD Screen		√
RS 485 Modbus Communication		√

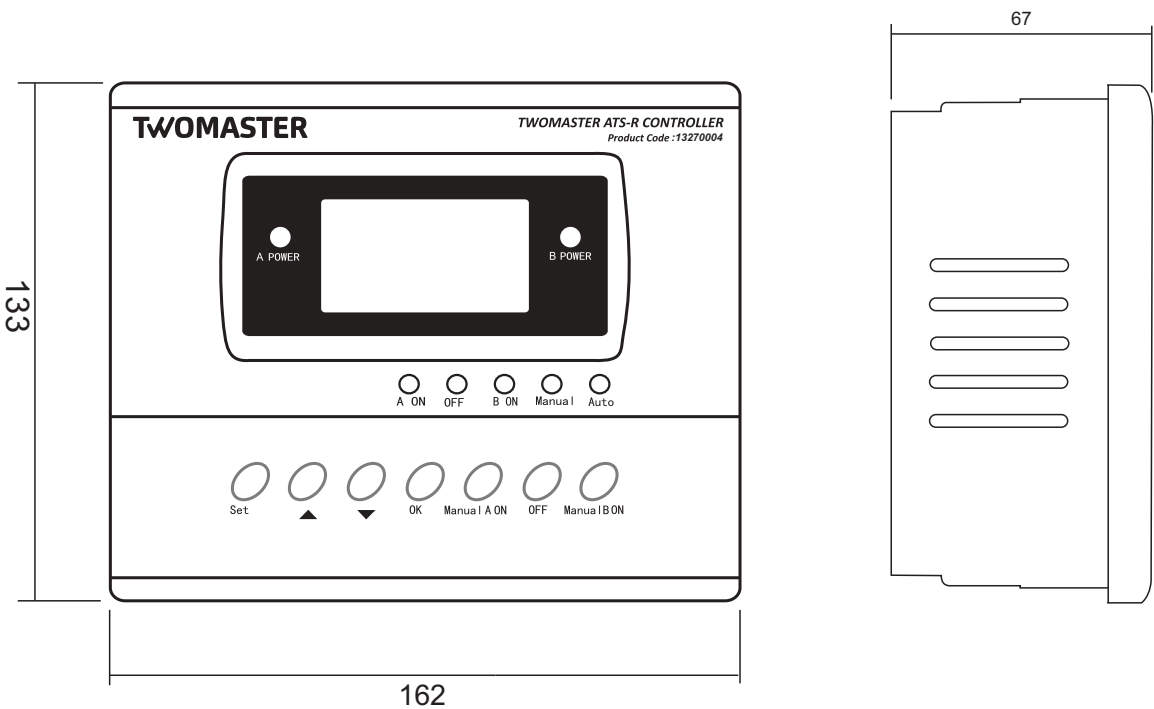
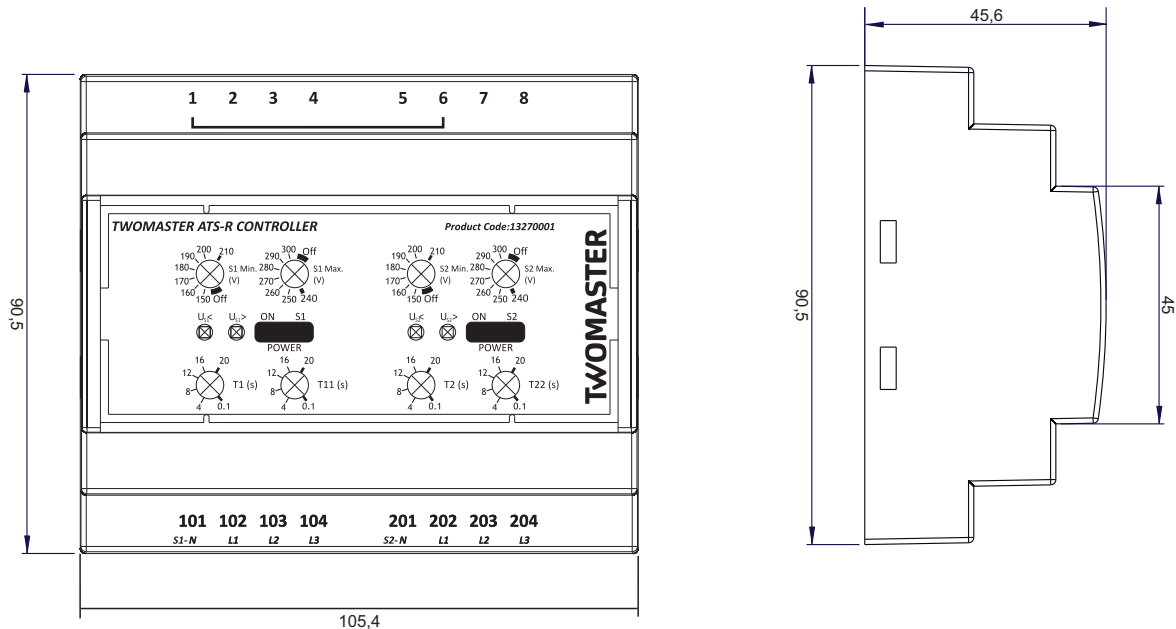
TWOMASTER ATS SERIES

40A-6300A

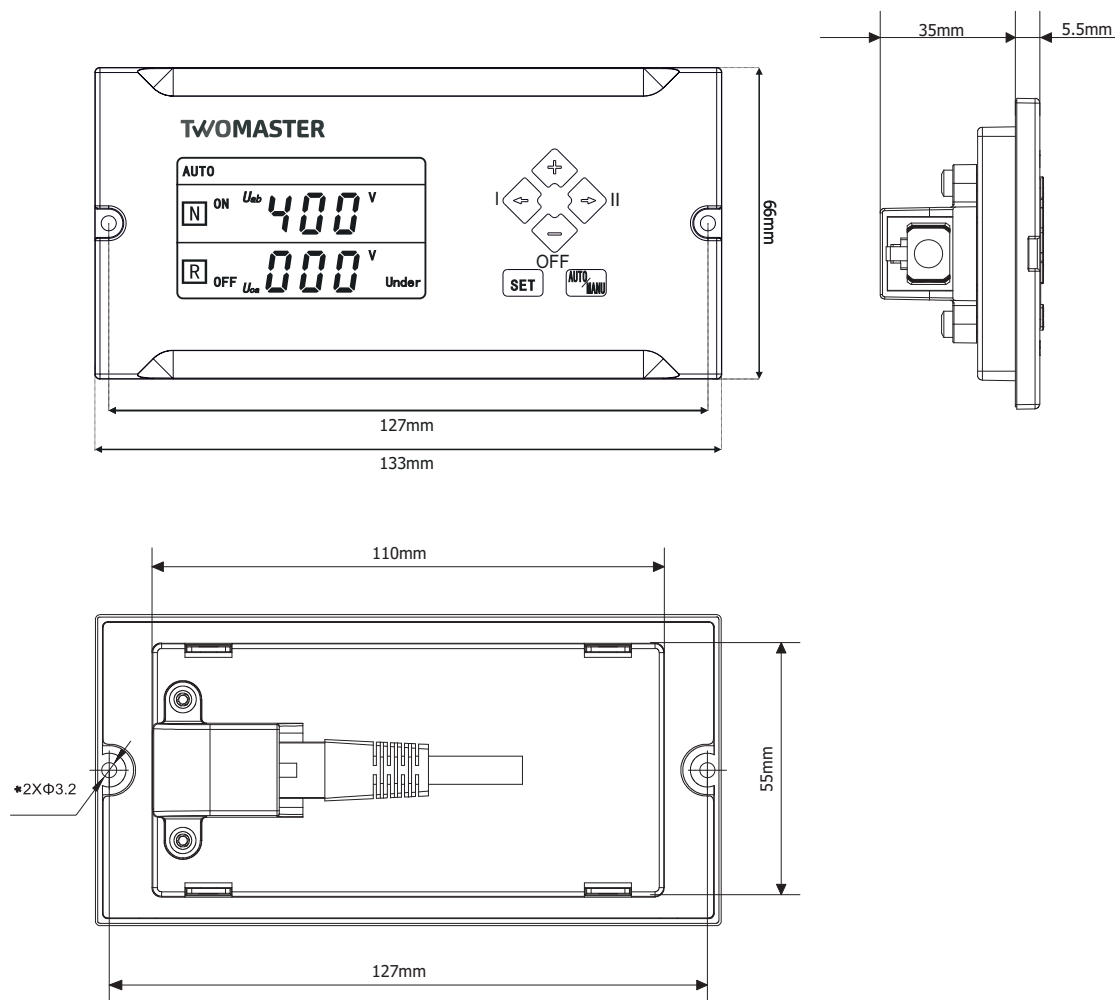


Diemensions

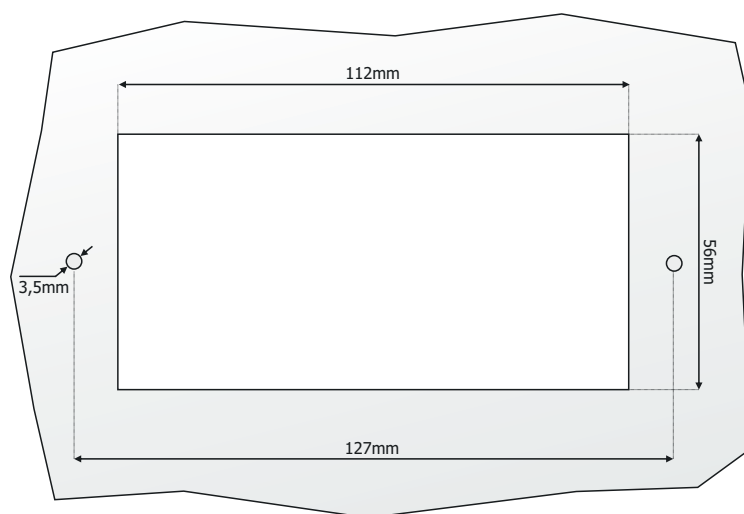
Automatic Control Unit



Dimensions Twomaster LCD



Overall dimensions



Split mounting hole size

