

1,600 Amps @ +24VDC & 288 Amps @ -48VDC 162H Power System



- **New: Pluggable rectifier shelves that can be added in the field as required**
- **100 Amp Switchmode Rectifiers**
Up to 16 can be equipped per bay, for a total of 1,600 Amps of +24VDC power
- **24 Amp Converters @ -48VDC**
Each converts the +24VDC supplied by the rectifiers into -48VDC. Up to twelve can be equipped for a total of 288 Amps.
- **Front Accessible**
Completely Front Accessible for Installation, Operation and Maintenance

Product Description

The 162H Power and Distribution System supplies 100 to 1600 Amps of +24VDC power in increments of 100 Amps. The system is self-contained, providing power, distribution, alarms, and monitoring within one bay. To create the flexible power needed by the 162H, up to sixteen switchmode rectifiers can be used. An optional converter configuration is available for +24VDC to -48VDC, with a capacity of up to 288 Amps. The 162H was designed for ease of installation, incorporating all customer connections for loads, controls, alarms, and monitoring from the front of the bay.

Now available with the 162H are pluggable rectifier shelves. This feature allows initial expenses to be deferred by equipping the system with rectifier shelves as needed now, and then adding shelves as required at a later date.

Users may select from two distribution options:

- 80 positions that can be used for circuit breakers or fuses ranging from 2 to 100 Amps. There are 40 positions for +24VDC and 40 positions for -48VDC.
- 56 positions total, with 48 available for circuit breakers or fuses ranging from 2 to 100 Amps. Of the 48, 24 positions are for +24VDC and 24 are for -48VDC. There are also 8 positions available for circuit breakers ranging from 125 to 450A.

The system is equipped with eight relays for extending alarms and status remotely, and LEDs for immediate visual notification of alarms and operating status. Access to the plant is also available remotely through the optional Gateway feature, which allows the user to work more efficiently. Low voltage load disconnects (LVLD) and manual battery disconnects are optional.

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Specifications

Input

Voltage Range	176 - 264VAC, single phase, 220VAC nominal
Frequency	47 - 63Hz
Current	16 Amps typical, 19 Amps maximum @ 100% load per rectifier

Output

Float Voltage Range	23.5 - 28.5VDC. Factory set @ 27.2VDC
Current	Maximum of 1,600 Amps at + 24VDC per bay (from rectifiers) Maximum of 288 Amps at - 48VDC per bay (from converters)

Environmental

Storage Ambient	-40°F to +85°F (-40°C to +85°C)
Operating Ambient	23°F to 122°F (-5°C to +50°C)
Humidity	< 95% non-condensing (maximum)

Mechanical

Height	84.0" (2133.6 mm)
Width	23.62" (600 mm)
Depth	23.62" (600 mm)
Weight	1,000 lbs. (453.6kg) when equipped with 16 rectifiers and 12 converters
Mounting	Floor
Cooling	Front-to-rear fans in rectifiers and converters

Documentation

Product Manual	4380418PD
J Drawing	J-438162P

Visual Indicators

MMC Front Panel	LED Description	Color	LED Description	Color
	Power Major	Red	Battery Fuse	Red
	Power Minor	Amber	Battery Distribution	Red
	Rectifier Major	Red	Battery Discharge	Red
	Rectifier Minor	Amber	Load Disconnect	Red
	Battery Monitor	Amber	Total Current	Amber
	Distribution Fuse	Red	AC Fail	Amber
	Distribution Current	Amber	Temp High/Low	Amber
	MMC OK	Green	Float Mode	Green
	Low Low Voltage	Red	Equalize Mode	Amber
	Low Voltage	Amber	BTC Active	Amber
	High Voltage	Red		

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Contact Closures

Power Major	Rectifier Major	AC Fail	High Voltage
Power Minor	Rectifier Minor	Battery on Discharge	High Temperature

Equipment Listing

List #	Description
L2	Basic bay: +24VDC @ 1600 Amps. Includes controller, provisions for 5 rectifier shelves, front access. Mounted in a welded box frame 23.62"W x 23.62"D x 7'0"H
L8	Customer input connection for 12AWG wiring
L9	Customer input connection for 10AWG wiring
L15	Distribution configuration: 80 total positions for 2 to 100 Amps. 40 left / 40 right for plug in circuit breakers or fuses.
L16	Distribution configuration: 56 total positions. 24 for -48VDC and 24 for +24VDC, for use with circuit breakers or fuses up to 100 Amps. 8 additional positions for circuit breakers ranging from 125 to 450 Amps.
L30	Pluggable rectifier shelf, 400A @ +24VDC, 220VAC input
L31	Blank panel for rectifier shelf
L32	Rectifier module, 100A @ +24VDC, 220VAC input
L33	Blank panel for unequipped rectifier module position
L45	Converter shelf, 144 Amps
L46	Supplemental converter shelf, 144 Amps
L47	Converter module, 24 Amps @ -48VDC, +24VDC input
L48	Blank panel for unequipped converter module position
L60	Low voltage load disconnect (LVLD) for +24VDC
L62	Low voltage load disconnect (LVLD) for -48VDC
L70	Manual internal battery disconnect kit, 800A dual fuse with alarming for two battery connections
L72	External battery or load disconnect kit. 800A dual fuse (wall mount)
L73	External battery or load disconnect kit. 125-250A dual circuit breaker (wall mount)
L74	External battery disconnect kit. 800A @ +24VDC contactor (wall mount)
L75	Emergency power off (EPO) wall switch, for use with L74 only
L90	Alarm cable, 25'. *50' included as standard equipment
L91	Alarm cable, 100'. *50' included as standard equipment
L92	Alarm cable, 150'. *50' included as standard equipment
L93	Alarm cable, 200'. *50' included as standard equipment
L95	Gateway kit used for remote communications. Use with Ethernet or RS232 port. Modem port available (L96)
L96	Modem communication kit for use with L95
L100	Installation hardware kit (output fastener hardware)
L101	Frame isolation hardware kit (washer and insulation pad)