MQ POWER
18111 So. Santa Fe Avenue
Rancho Dominguez, CA 90221
(310) 604-9488 • FAX (310-635-0255)

Denyo Circuit Breakers & Current Sensing Relay Installation

The Denyo-built, WhisperWatt™ engine-generators are manufactured with UL Listed, main line circuit breakers mounted as standard equipment. The generators also use UL Listed, current-sensing relays to offer expanded protection of generator AC output. This unique protection scheme offers maximum flexibility for multiple voltage output connections.

The circuit breakers are located in the generator control panel behind a dead-front, removable cover. The circuit breakers are sized to operate at the highest rated ampacity, or Low Wye voltage. A dedicated, inverse time delay, over-current relay is provided to monitor and protect alternator output, at the lowest rated ampacity, or High Wye voltage. In the event of an overload or short circuit, the over-current relay activates the generator main line circuit breaker shunt trip and opens the circuit breaker. Each over-current relay is factory calibrated and tested prior to shipment. *{Refer to the Table I for circuit breaker ratings and current sensing relay set points.}*

For all models DCA25 through DCA150, AC voltage output is made via cables connected to a rotary voltage selector switch, allowing for quick manual voltage selection. The voltage switch is mounted inside the generator housing with a barrier assembly including a screw cover access. The voltage selector switch clearly indicates the voltage positions and is pad-lockable.

For all models DCA180 through DCA800, AC voltage output is made via cables connected to a power output reconnection bus bar. Cable entrance to the power output terminals is made through a cable entrance panel. Mechanical lugs are provided for each phase, neutral and ground. Connection diagrams for the various voltage selections and safety placards are clearly displayed.

Each engine-generator is provided with a customer entry panel as an integral part of the generator housing, to completely isolate it from engine vibration. The panel is recessed into the generator housing with seamless construction and a hinged cover to shield the interior from falling water. The bottom of the customer panel is sloped downward for cable entry and to eliminate water accumulation.

This combination of voltage output flexibility; customer convenience and inherent design safety contribute to make the MQ Power generators the best in the industry.

jgrose
Dec/04
Rev_2

TABLE 1

Circuit Breaker Sizing And Overcurrent Relay Set Points
MQ Whisperwatt™ Generators

Genset Model Number	KW Prime Rating @0.8 PF	KVA Prime Rating @0.8 PF	Amps @ 240VAC 3-Phase	Amps @ 480VAC 3-Phase	Circuit Breaker Trip Mechanism	CirBrkr Trip Rating	Over Current Relay Trip Set Point
DCA25SSIU	20	25	60	30	Thermal-Magnetic	60A	30A
DCA25USI	20	25	60	30	Thermal-Magnetic	60A	30A
DCA45SSIU	36	45	108	54	Thermal-Magnetic	110A	54A
DCA45USI	36	45	108	54	Thermal-Magnetic	110A	54A
DCA45USIXF	36	45	108	54	Thermal-Magnetic	110A	54A
DCA60SSIU	48	60	144	72	Thermal-Magnetic	150A	72A
DCA70SSJU	56	70	168	84	Thermal-Magnetic	175A	84A
DCA70USJ	56	70	168	84	Thermal-Magnetic	175A	84A
DCA85SSJU	66	82	197	99	Thermal-Magnetic	250A	100A
DCA85USJ	66	82	197	99	Thermal-Magnetic	250A	100A
DCA100SSJU	80	100	241	120	Thermal-Magnetic	250A	120A
DCA100SSVU	80	100	241	120	Thermal-Magnetic	250A	120A
DCA125SSJU	100	125	301	150	Thermal-Magnetic	300A	152A
DCA125USJ	100	125	301	150	Thermal-Magnetic	300A	152A
DCA150SSJU	120	150	361	180	Thermal-Magnetic	400A	180A
DCA150SSVU	120	150	361	180	Thermal-Magnetic	400A	180A
DCA150USJ	120	150	361	180	Thermal-Magnetic	400A	180A
DCA180SSK	144	180	433	216	Electronic Trip	500A	216A
DCA220SSK	176	220	529	264	Electronic Trip	600A	256A
DCA220SSVU	176	220	529	264	Electronic Trip	600A	256A
DCA300SSK	240	300	721	360	Electronic Trip	800A	360A
DCA400SSK	310	400	962	481	Electronic Trip	1000A	480A
DCA400SSVU	320	400	962	481	Electronic Trip	1000A	480A
DCA600SSK	480	600	1443	721	Electronic Trip	1600A	720A
DCA800SSK	640	800	1924	962	Electronic Trip	2500A	960A

NOTE: Some models may be discontinued but are published for archive purposes.

jgrose
Sep-04