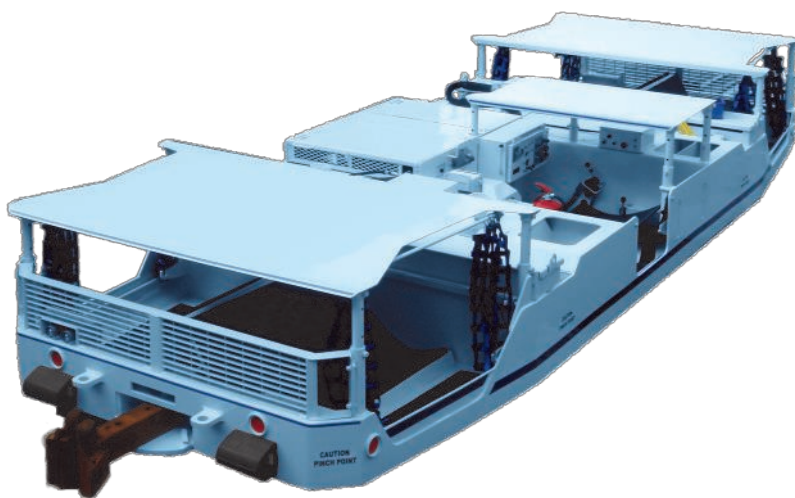




Q800 SERIES DIGITAL DC/DC LOCOMOTIVE CONTROLLER

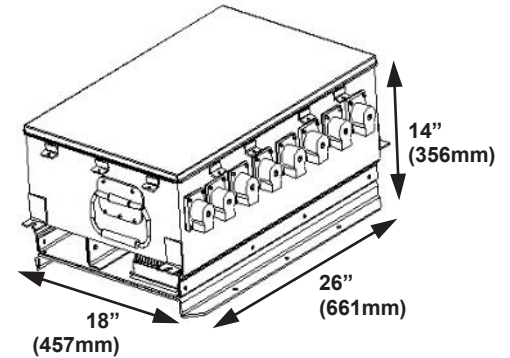
(ALSO FOR MAN-TRIPS AND UTILITY VEHICLES)



Available as:
20-50HP at 120VDC
40-100HP at 250VDC

Q800 SERIES HIGHLIGHTS

- Compact, digital DC/DC traction drive for Man-Trips, Locomotives and Utility Vehicles
- Single motor drive for portal buses and tandem motor drive for locomotives
- Microprocessor based drive system using the latest NPT (non-punch through) IGBT technology
- Sensor-less motor speed indication and automatic over-speed protection
- Compact enclosure houses all power control devices, capacitor bank, and soft start devices.
- Torque control mode provides superb traction and acceleration.
- Rugged, short-circuit proof power circuit provides excellent long term reliability.
- Comprehensive display housed in XP headlight enclosure.
- Multiple control options: standard analog foot switch, radio remote control, operator station, PLC
- Regenerative braking provides smooth, powerful, braking down to almost standstill. This feature greatly prolongs life of mechanical brakes.
- Solid State Reversing eliminates directional contactors from the system.



SPECIFICATIONS

Model	Part Number	Description	Rated Power				
			Power @ Rated Volts	Frequency Range	Voltage Range	AMPS @ Rated Power	
Q812	A800345	Single Motor 40HP 128V	INPUT	32kW @ 120V	DC	80 - 160VDC	267A @ 32kW
			OUTPUT	30kW @ 120V	DC	0 - 98% Vin	250A @ 30kW
Q820	A800359	Dual Motor 20HP 128V	INPUT	62kW @ 120V	DC	80 - 160VDC	517A @ 62kW
			OUTPUT	60kW @ 120V	DC	0 - 98% Vin	2 x 250A @ 60kW
Q826	A800346	Single Motor 80HP 240V	INPUT	77kW @ 300V	DC	160 - 360VDC	257A @ 77kW
			OUTPUT	75kW @ 300V	DC	0 - 98% Vin	250A @ 75kW
Q826-RB	A800347	Single Motor 80HP 240V with Emergency Braking	INPUT	77kW @ 300V	DC	160 - 360VDC	257A @ 77kW
			OUTPUT	75kW @ 300V	DC	0 - 98% Vin	250A @ 75kW
Q821	A800314	Dual Motor 40HP 240V	INPUT	152kW @ 300V	DC	180 - 360VDC	506A @ 152kW
			OUTPUT	150kW @ 300V	DC	0 - 98% Vin	2 x 250A @ 150kW

Input Voltage: 128V battery (80VDC min — 160VDC max)
300V Trolley (180VDC min — 360VDC max)

Output current:
Tramming (Single Motor): 250A continuously, 1600A peak for 10 sec.
Tramming (Dual Motor): 2x 125A continuously, 800A peak for 10 sec
Regen Braking: 250A maximum

Motor HP maximum range: 40HP @ 128VDC Single motor - 20HP Dual Motors
80HP @ 240VDC Single motor - 40HP Dual Motors

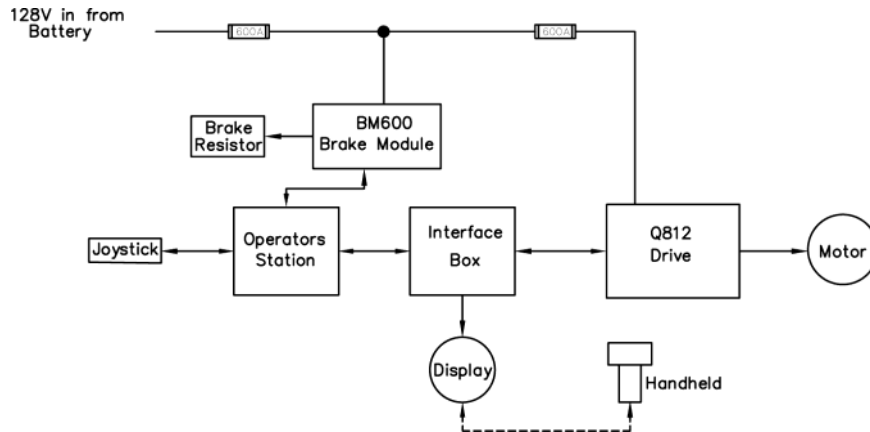
Multi-motor Operation: 2 Q800 units can easily be operated in tandem (4 x 40HP motors)

Regenerative Braking: Braking occurs whenever the operator moves the joystick towards themselves. Braking intensity is proportional to the movement of joystick away from center, the greater the movement, the fiercer the braking action.

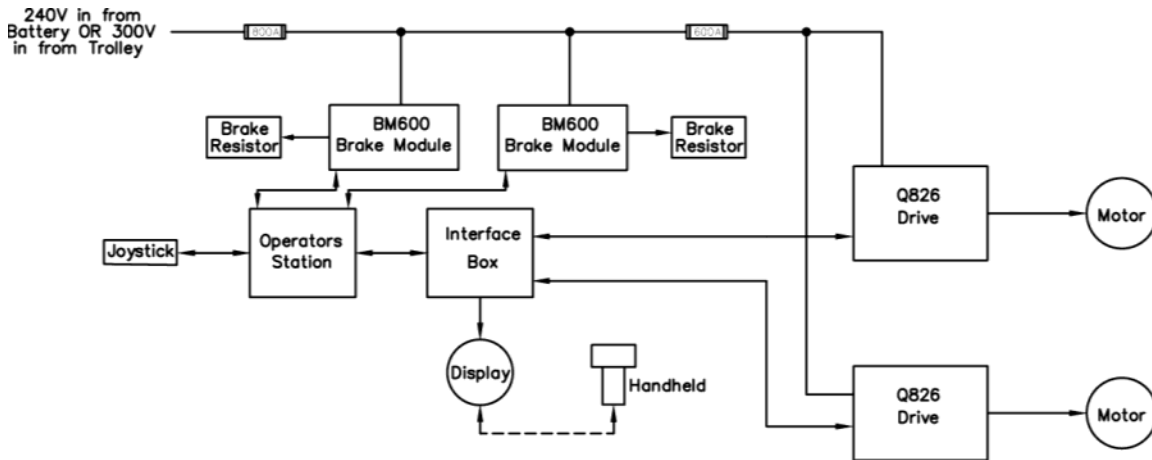
Q800 SERIES

DIGITAL DC/DC LOCOMOTIVE CONTROLLER

TYPICAL Q812 SINGLE MOTOR SUGGESTED CONNECTION DRAWING (SYSTEM # A800337)



TYPICAL Q826 DUAL MOTOR SUGGESTED CONNECTION DRAWING (SYSTEM # A800335)



BM 600 DC BRAKING MODULE*

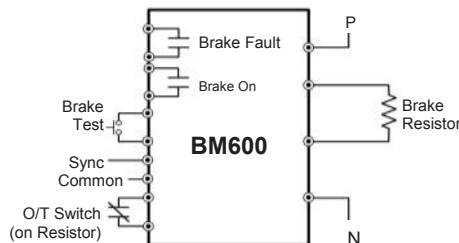
HIGHLIGHTS:

- Absorbs high voltage surges on DC voltage supplies due to regenerative braking of DC or AC traction drives - adjustable from 120V to 400V.
- Capable of dumping up to 600A into braking resistor
- 10 duty cycle (e.g. 6 seconds on, every 60 seconds)
- Compact, single enclosure houses all components, including internal isolated power supply.
- Contains provision for resistor over temperature protection via resistor OT sensor.
- Brake On and Brake Fault output via relay contacts.

SPECIFICATIONS:

- Braking Threshold Voltage: Adjustable 120V to 400V
- Maximum Current: 600A (per module)
- Duty Cycle: 10% (e.g. 6 seconds on, every 60 seconds)
- Braking Resistor Rating: 150V Threshold: 0.5 Ohm, 5kW continuous (Battery Systems)
360V Threshold: 1 Ohm, 12 kW continuous

Part #	Input Voltage
A800990-L	120VDC
A800990	155VDC
A800991-L	300VDC
A800991	317VDC
A800992	360VDC



*Backward compatible with Saminco BM300 Brake Choppers

**OPTIONS* FOR THE
Q800 SERIES**

Part Name	Description	SAMINCO Part Number
Q812	For Single Motor 40HP 128V	A800345
Q820	For Dual Motor 20HP 128V	A800359
Q826	For Single Motor 80HP 240V	A800346
Q826-RB	For Single Motor 80HP 240V with emergency braking	A800347
Q821	For Dual Motor 40HP 240V	A800314
Dual Joystick	Q800 series IFB Dual Joystick	A800362
Interface box	Wired Remote Control IF box - universal	A800364
Op-Station	Operator's Station with shunt / k1 / BM PCB	A800291
Joystick	MSHA approved	A800072
Diagnostic Display	With programming port	A800348
Handheld Programmer	Allows setting and viewing of system parameters and logs	A800220-1
LU300b	12VDC 300W light supply, 90V to 360VDC input	A800966
LU301	14.4VDC, power supply, 120-300VDC input	A800904B
Choke box	.7mH	A800501
Dual Diode Module	800AMP	A800508
Power Supply	200-400V 24 75W	G9002-042
Resistor	1900W .12 OHM 105A (Qty 16 required)	R8000-019
Resistor Bank	Resistor Bank 1 Ohm for 300VDC systems (Tappable)	A800131
DC Brake Module	(BM600) 600A, 360V Threshold for Q826	A800992
DC Brake Module	(BM600) 600A, 300V Threshold	A800991
DC Brake Module	(BM600) 600A, 155V Threshold	A800990
Battery Charger	BC151 / 240N, 240V, 150A, 270-360V in, 250V out	A800636
Battery Charger	BC151 /120N, 120V, 150A, 270-360V in, 146V out, 10kHz	A800639
Cable	For joystick to OP-Station, 6CON, 22AWG, 6PIN, F 270"	W6004-026
Cable	For PB to drive, 18CON, 22 AWG, 24PIN, 336"	W6004-023
Cable	For IFB to drive, 25CON, Sub-D, 336"	W6004-070
Cable	Cable, 25CON, Sub-D, 72"	W6004-071

*See salesperson for all available options and configurations.



Q800 Drive installed



Brake Module installed



Operator Station installed

Visit our website at www.samincoinc.com or email us at sales@samincoinc.com



FLORIDA
Headquarters
10030 Amberwood Rd.
Fort Myers, FL 33913
PH: 239-561-1561
FAX:239-561-1502

WEST VIRGINIA
Service Branch
517 Virginia Ave.
Huntington, WV 25701
PH: 304-523-4700
FAX: 304-523-4039

COLORADO
Service Branch
Cedaredge, CO
PH: 940-623-0000

SOUTH CAROLINA
Service Branch
Anderson, SC
PH: 304-654-9054

INTERNATIONAL LOCATIONS:
Boksburg, South Africa PH: +11 397 6026
Australia PH: +86 15140090694
China PH: +61 2 9899 6857
Poland