



MSc bidirectional DC/DC converters have especially been designed for energy storage applications. Energy storages based on different technologies such as lithium-ion/lead/flow batteries, super capacitors and fuel cells can be efficiently and effectively controlled with MSc converters.

DC/DC converters are based on the newest converter technology and they can also be installed in parallel in order to cover wide power range.

The converters can operate in wide voltage range area (from 35Vdc up to 800Vdc) and the single unit maximum current can be up to 200A

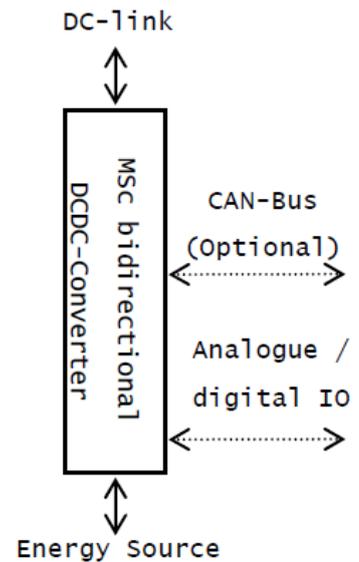
OPERATION MODES

Current control

The direction of the power flow is controlled by the digital input and the external analogue signal is given to specify the amount of the charge/ discharge current.

Voltage control

The direction and the amount of the power flow is based on measured and given reference DC-link voltage values.



TECHNICAL DATA

MODEL	80DCDC750DE	3x40DCDC750DE	200DCDC750DE
Topology			
Operation mode	Bidirectional	Bidirectional	Bidirectional
Low voltage / Energy source			
DC Voltage range	35—700Vdc	3 x 35—700Vdc	35—700Vdc
Nominal current	80A	3 x 40A	120A / 180A
Maximum current	80A	3 x 67A 1 min./10 min.	200A 1 min./10 min.
High Voltage / DC-link			
DC voltage range	200—800Vdc	200—800Vdc	200—800Vdc
Efficiency			
Maximum efficiency	97	97	97
I/O Connections			
Input signals	Digital/Analogue	3 x Digital/Analogue	Digital/Analogue
Output signals	Digital/Analogue Open collector fault relay	3 x Digital/Analogue Open collector fault relay	Digital/Analogue Open collector fault relay
Fieldbus	CAN-bus (optional)	-	CAN-bus (optional)
General Data			
Dimensions (w x h x d) in mm	160 x 561 x 291	285 x 686 x 344	285 x 686 x 344
Weight in kg	20	27	27
Cooling	air cooled	air cooled	air cooled
Operation temperature	-10C...+40C	-10C...+40C	-10C...+40C
Enclosure	IP 20	IP 20	IP 20

STANDARDS COMPLIANCE

- Safety requirements for power electronic converter systems and equipment IEC 62477-1:2012
- EMC immunity EN 61800-3:2004

FEATURES

- Efficient and reliable
- Wide voltage range
- Parallel connectable

OPTIONS

- Local control panel
- Other fieldbuses
- Liquid Cooled models