

EEl MV3300 SERIES

CORE DRIVE FOR MV SOLUTIONS

The EEl-MV3300 Series converters offer a competitive drive solution, which can be adapted to specific Customer needs with a wide range of optionally available components and accessories.

EEl-MV series inverters are characterized by:

- Modular design: EEl MV drives are made of modular stacks, for an easy maintenance and reduced MTTR.
- Keypad interface for setup drive parameters for easy commissioning.
- Easy access for service operations.
- Liquid cooled

EEl-MV Series are suitable for use in a wide variety of activity fields, for applications in both 2Q and 4Q and for the connection toward the grid of generators.

PRODUCT RANGE

Range of output power available

- 0,9 – 3,6 MVA 3,3kV

SYSTEM ARCHITECTURE NPC 3 LEVEL:

- Solution 2Q – SCR DUAL FEED 3,3kV
- Solution 4Q – 3 LEVEL NPC INPUT 3,3kV

MOTOR CONTROL

- Close loop FOC
- Sensorless FOC
- V/F control

ADDITIONAL COMPONENTS

- Capacitor bank
- Braking system
- Transformer
- dV/dt or sinus filters generator side
- LCL Filters grid side
- Common mode filters



MODULAR

Drives are made of modular stacks for easy maintenance



ADVANCED

Flexible software configuration allow wide functionalities



READY

Drives designed for easy and fast integration in cabinet

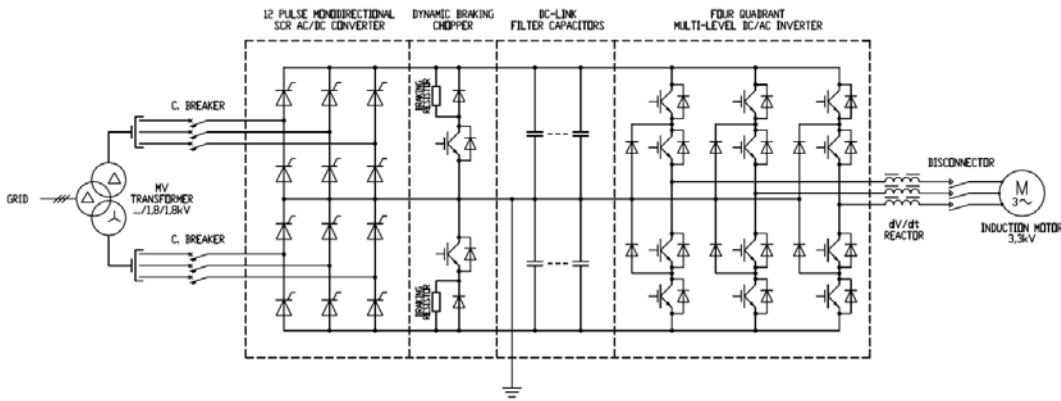
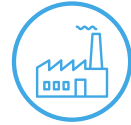


RELIABLE & EFFICIENT

Equipped with latest power technology, robust design and energy saving



2Q - 12 PULSE INVERTER



Complete chassis MV 2Q 12PULSE INVERTER 3,3kV, water cooled made by EEI

The unit is composed by HV double diode rectifier and HV IGBT inverter suitable for command and control A.C. Asynchronous motor 3,3kV 3Ph.

There are included also the following parts:

- Set drive (front end and inverter)
- Dc-link capacitor bank

- Set of dc-link chokes
- Set internal fitting for hydraulic plant (no. two stainless steel manifolds and fitting + internal flexible pipes in kynar

- Kit PCBs
- HMI (optional)
- braking unit (optional)

MODEL	9MV332Q-90	9MV332Q-180	9MV332Q-270	9MV332Q-360
GENERAL SPECIFICATION				
Rated Power	900 kW	1800 kW	2700 kW	3600 kW
Rated current	200 A	400 A	600 A	800 A
Rated Input Voltage	3,3kVac +10%/-15% 3Ph IT or TN			
Rated input frequency	50/60 Hz ±5%			
Auxiliars voltage	Aux. supply circuit voltage: : 24 VDC			
Topology	NPC 3 level PWM Technology			
System Architecture	2Q- 12P DIODE RECTIFIER + INVERTER			
Overload	110% for 1 minute every 10 minutes			
Motor Power factor	0,87			
Dimensions 12 pulse module (WxHxD)	500x650x750 mm		500x800x750 mm	
Dimensions for each phase module (WxHxD)	250x652x750 mm		300x800x750 mm	

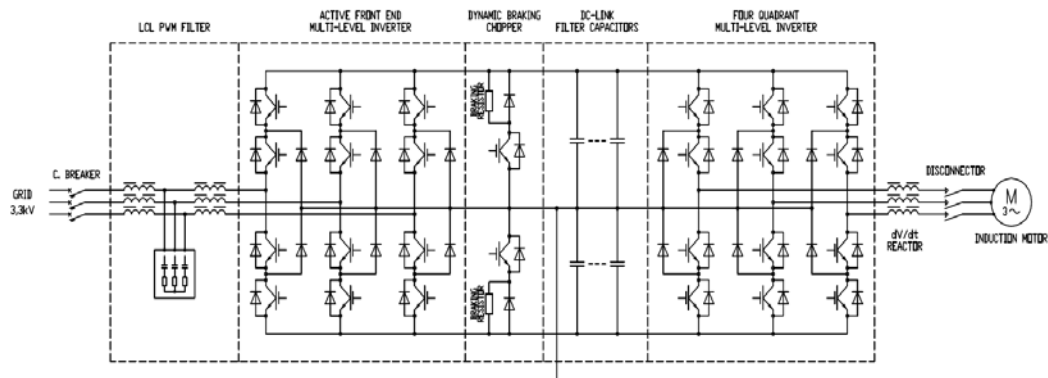
INSTALLATION				
Operating temperature	-5°C ÷ +50 °C	-5°C ÷ +50 °C	-5°C ÷ +50 °C	-5°C ÷ +50 °C
Storage temperature	-10 °C ÷ +55 °C	-10 °C ÷ +55 °C	-10 °C ÷ +55 °C	-10 °C ÷ +55 °C
Relative Humidity	90% @ 20°C no condensing			
Altitude	< 1000 m a.s.l.	< 1000 m a.s.l.	< 1000 m a.s.l.	< 1000 m a.s.l.
Protection Degree	IP 00	IP 00	IP 00	IP 00
Cooling method	Water cooling system			

COMMUNICATION	
Communication interfaces	CAN Bus and RS485 built in communication or Ethernet connection through Modbus TCP or Profibus (TBD)

PROTECTIONS	
Self-diagnostic	Over current, Short circuit, Ground Fault, Phase loss detection, Over Voltage, Under Voltage, Over temperature. Others upon request.

EEI - Equipaggiamenti Elettronici Industriali S.p.A.
 T +39.0444.562988 | F +39.0444.562373 (6 linee r.a.) | @ staff@eei.it

4Q - AFE/ INVERTER



Complete chassis MV 4Q AFE+INVERTER 3,3kV, water cooled made by EEI.

The unit is composed by HV 3,3kV double stage "AFE" (Active Front End) and inverter suitable for command and control A.C. Asynchronous motor 3,3kV 3Ph

There are included also the following parts:

- Set drive (front end and inverter) with own display panel
- Dc-link capacitor bank
- Set internal fitting for hydraulic plant (no. two stainless steel manifolds and fitting +

internal flexible pipes in kynar

- Kit PCBs
- HMI (optional)
- Precharge circuit (optional)
- braking unit (optional)

The connection with between section AFE and section INVERTER could be as totem, side by side etc... (TBD)

MODEL	9MV334Q-90	9MV334Q-180	9MV334Q-270	9MV334Q-360
GENERAL SPECIFICATION				
Rated Power	900 kW	1800 kW	2700 kW	3600 kW
Rated current	200 A	400 A	600 A	800 A
Rated Input Voltage	3,3kVac +10%/-15% 3Ph IT or TN			
Rated input frequency	50/60 Hz ±5%			
Auxiliares voltage	Aux. supply circuit voltage: : 24 VDC			
Topology	NPC 3 level PWM Technology			
System Architecture	4Q -AFE + INVERTER			
THDI (grid side)	< 3%			
Overload	110% for 1 minute every 10 minutes			
Motor Power factor	0,87			
Dimensions for each phase module (WxHxD)	250x650x755 mm		300x800x750mm	

INSTALLATION

Operating temperature	-5°C ÷ +50 °C	-5°C ÷ +50 °C	-5°C ÷ +50 °C	-5°C ÷ +50 °C
Storage temperature	-10 °C ÷ +55 °C	-10 °C ÷ +55 °C	-10 °C ÷ +55 °C	-10 °C ÷ +55 °C
Relative Humidity	90% @ 20°C no condensing			
Altitude	< 1000 m a.s.l.	< 1000 m a.s.l.	< 1000 m a.s.l.	< 1000 m a.s.l.
Protection Degree	IP 00	IP 00	IP 00	IP 00
Cooling method	Water cooling system			

COMMUNICATION

Communication interfaces	CAN Bus and RS485 built in communication or Ethernet connection through Modbus TCP or Profibus (TBD)
--------------------------	--

PROTECTIONS

Self-diagnostic	Over current, Short circuit, Ground Fault, Phase loss detection, Over Voltage, Under Voltage, Over temperature. Others upon request.
-----------------	--

EEI - Equipaggiamenti Elettronici Industriali S.p.A.

T +39.0444.562988 | F +39.0444.562373 (6 linee r.a.) | @ staff@eei.it