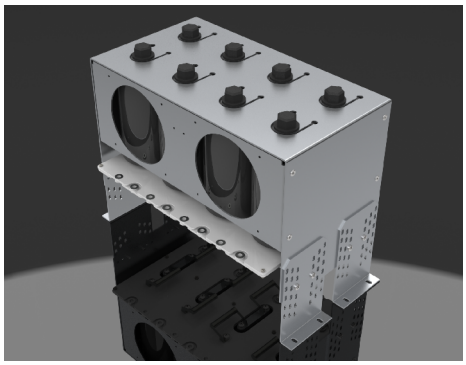
MTM-DCL09400ELT0700ALAA

DC-Link capacitor bank

PRELIMINARY TECHNICAL INFORMATION

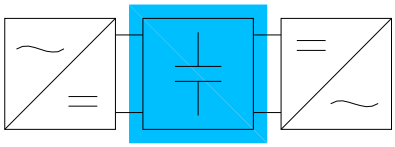
HIGHLIGHTS

- High reliability.
- Ready to use.
- Rated nominal working voltage 700 $V_{DC.}$
- 3000 V_{RMS}/1 min. busbar insulation.
- Modular concept.



non-contractual image

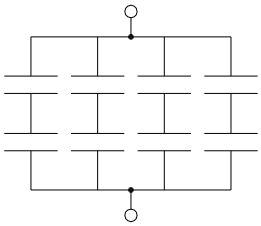
RECTIFICADORES GUASCH offers the most modular way for designing AC-AC or DC-AC power stages by connecting rectifier block, DC-link block and IGBT power stack. This way, the customer (and not the builder) decides the whole configuration of the entire power system.
The customer can obtain in a short delivery time a wide range of highly customized power assemblies in a very compact size.



MT series is suitable to implement power converters, choppers, half, full or three phase bridge inverters for motor control, welding, renewable energies, UPS, etc.
Other configurations and custom design assemblies can be made under request.

CAPACITORS GENERAL CHARACTERISTICS	
Mounting position:	upright or horitzontal
C_N tolerance:	±20%
Operating temperatures (min/max):	-40ºC / +85ºC
Storing temperature (min/max):	+5ºC / 35ºC
service life (hotspot ≤ 65ºC):	20000 h.

BASIC CIRCUIT:



CAPACITOR BANK GENERAL ESPECIFICATIONS

Description	*symbol*	*notes/test conditions*	*Min*	*Typ*	*Max*	*Units*
Total bank nominal capacitance	C_{TOT}			9400		µF
Maximum voltage	V_{DC_max}				900	V_{DC}
Rated working voltage	V_{DC}				700	V_{DC}
Equivalent series resistance	ESR			25		mΩ
Ripple current	I_{RIPP}	*100 Hz @ 85ºC*			52	A_{RMS}
Total bank impedance	Z_{TOT}	*100 Hz*		171		mΩ
Protection degree				IP-00		

120803 Rev.:0

Reserves the right to change limits, test conditions and dimensions given in this data sheet at any time without previous notice.

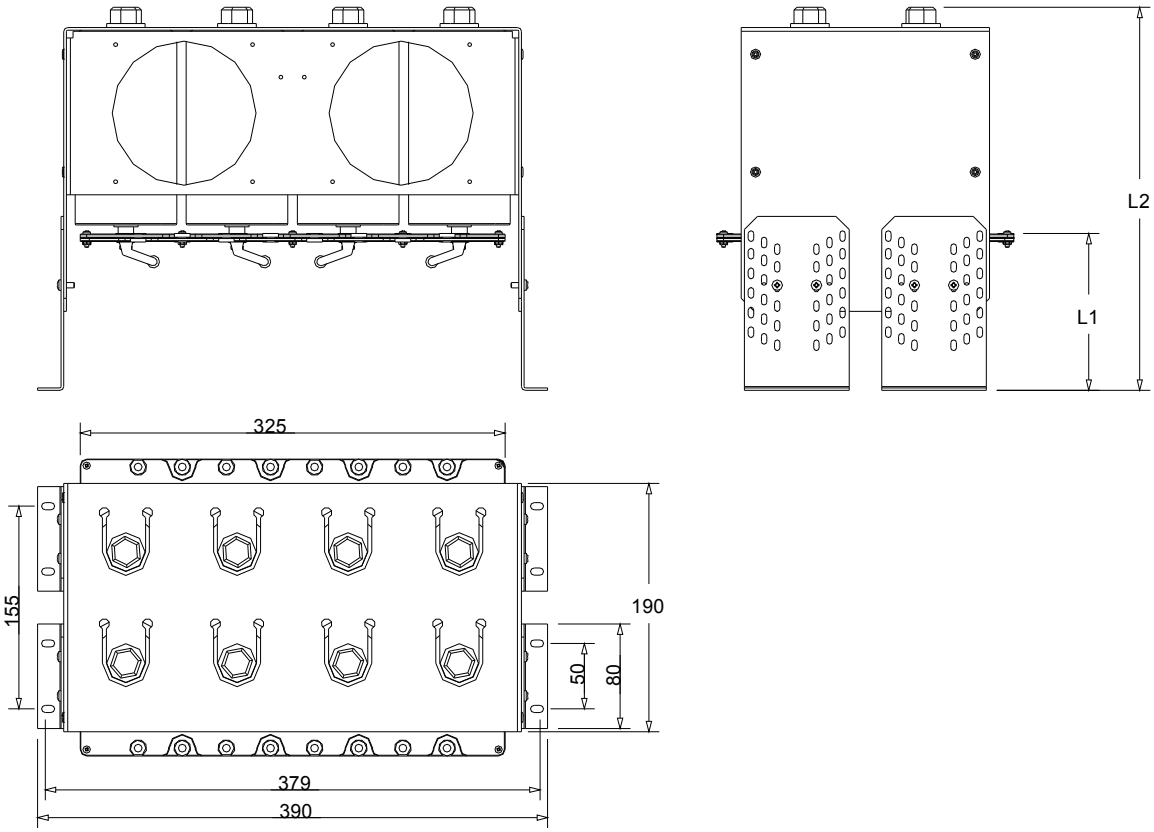
Where capacitors are required to operate at frequencies other than 100 Hz the multiplying factors given below, may be used to determine the ripple current capacity, at that frequency.

Frequency	100 Hz	250 Hz	500 Hz	1 kHz to 10 kHz	>10 kHz
Multiplying factor	1.00	1.05	1.20	1.32	1.35

PRODUCT VERSIONS

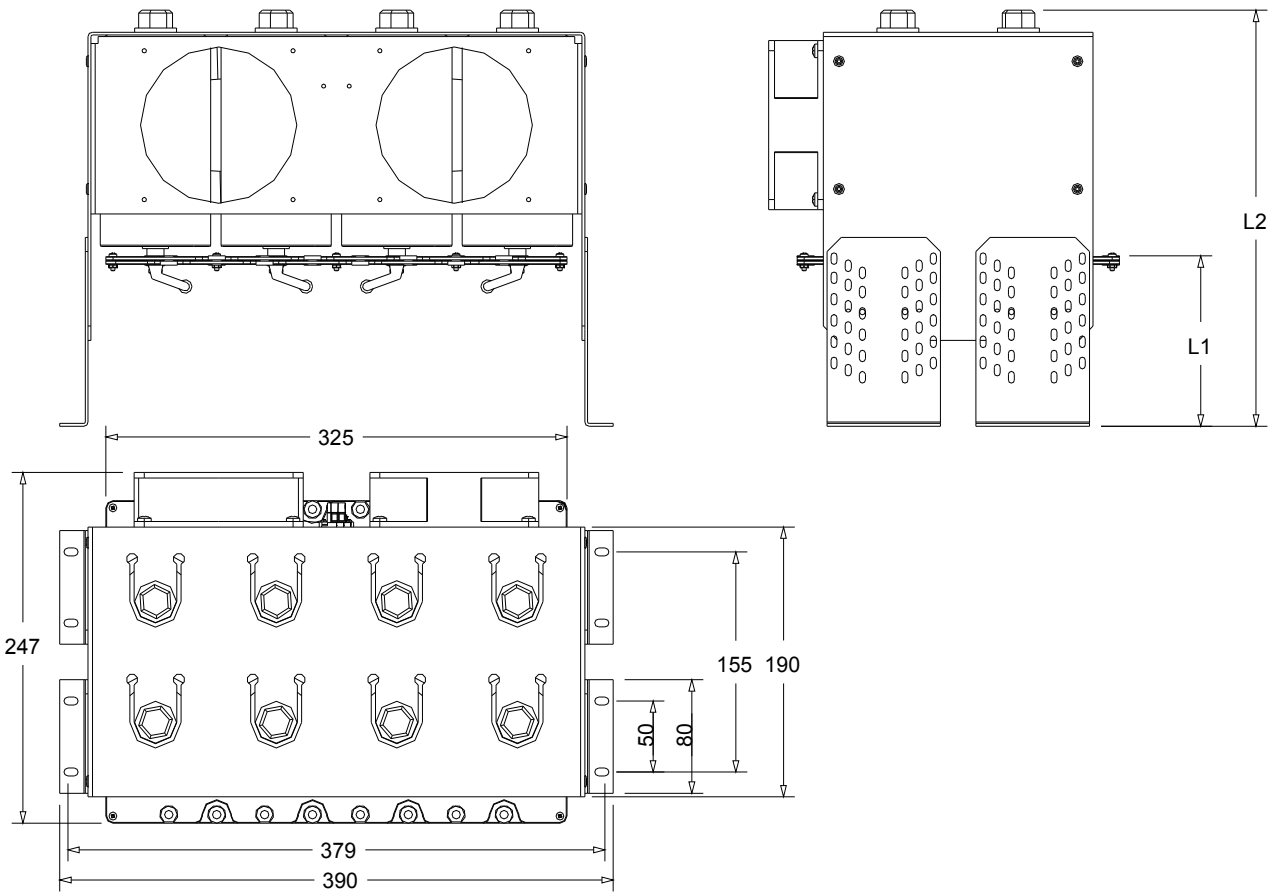
TYPE	L1	L2	Weight aprox.
MTM-DCL09400ELT0700ALAA	104 to 186	345 to 428	16.5 kg
MTM-DCL09400ELT0700ALAA/F	104 to 186	345 to 428	17.5 kg

DIMENSIONS:



MTM-DCL09400ELT0700ALAA (all dimensions in mm)

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MTM-DCL09400ELT0700ALAA/F (all dimensions in mm)

FORCED AIR FAN ESPECIFICATIONS

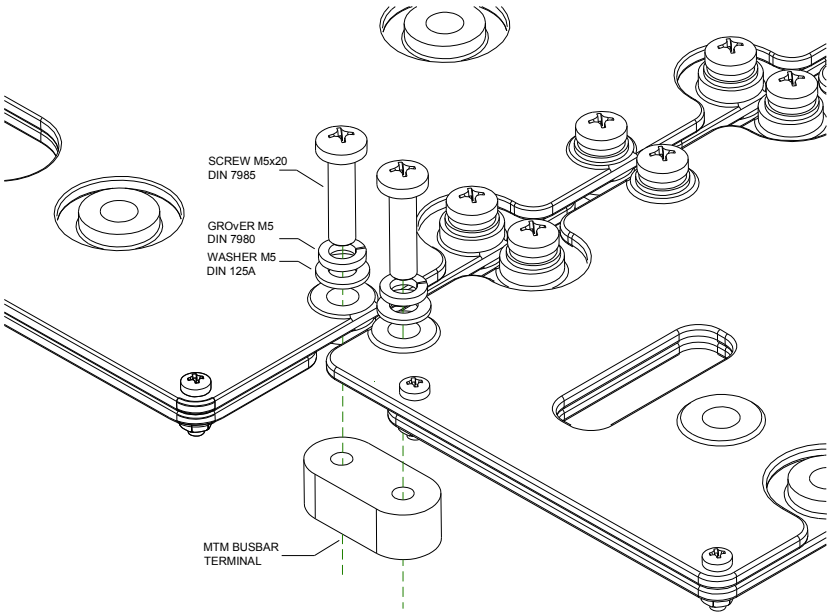
Description	*symbol*	*notes/test conditions*	*Min*	*Typ*	*Max*	*Units*
Supply voltage	V_{AC_IN}			230		V
Mains frequency	f_{AC_IN}			50	60	Hz
Power	P_{FANS}	*230V @ 50 Hz*		42		W

Reserves the right to change limits, test conditions and dimensions given in this data sheet at any time without previous notice.

PARALLEL STACKING:

In order to obtain greater capacity or current range the capacitor banks are designed to make easy a parallel assembly. Please refer to PARALLEL CONNECTION table for the parallelled bank especifications.

The connection system of the busbars allows an easy and neat way to connect them using our threaded terminal connectors.



DC-Link busbar assembly example.

All the necessary hardware to make the connection between DC-Link capacitor bank and an MTM inverter stack is included.

PARALLEL CONNECTION SPECIFICATIONS

Qty.	Total capacity	I_{RIPP}	ESR	Lo
2	18800 µF	104 A_{RMS}	12.5 mΩ	36 nH
3	28200 µF	156 A_{RMS}	8.4 mΩ	
4	37600 µF	208 A_{RMS}	6.3 mΩ	
5	47000 µF	260 A_{RMS}	5.0 mΩ	

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ADVANCED TECHNICAL INFORMATION: El producto se encuentra totalmente diseñado y las características se refieren a la fabricación en serie.
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ADVANCED TECHNICAL INFORMATION: The product design is complete and final characterisation for volume production is well in hand.
No Annotation: The product parameters are fixed and the product is available to datasheet specification.

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