



DMC5 - High Power Inverter

The solid, powerful basis for electric motors



Safe in all respects

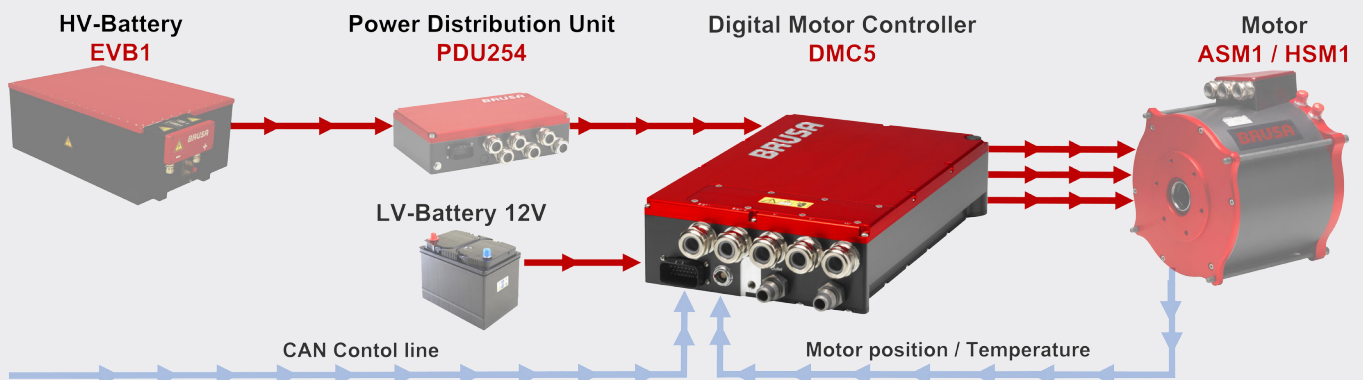
- Control of all types of three - phase motors
- Prepared design for ISU - integration according to ISO26262 (optional)¹
- Passive interlock
- Fully galvanic separation between HV and LV
- High IP - protection

Advanced technology

- Resonant SoftSwing[®] topology for minimal switching losses
- Very compact and lightweight design
- Patented Liquid Pin[®] cooling system for optimal temperature behavior and best performance
- Individual programmable motor tables for control of electric motors
- CAN interface
- User software CVI in delivery

¹ = Not DMC544

Example of use





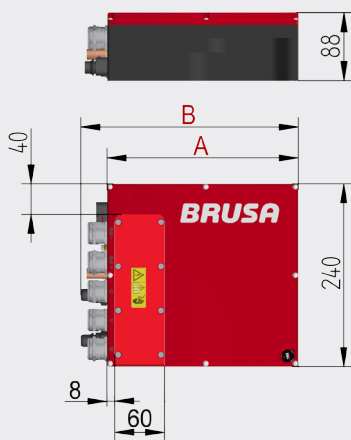
Specifications DMC5x4

Power supply HV and LV	DMC514	DMC524	DMC534	DMC544	
Min. input voltage Kl.15 (switch on DMC)	6	6	6	6	V
Min. input voltage Kl.15 (automatically shut down DMC)	2	2	2	2	V
Range HV - input voltage for operation	120 - 450	120 - 450	120 - 450	120 - 450	V
Min. HV - input voltage for full current output	200	200	200	200	V
X - capacity (for pre - charging HV)	200	380	560	740	µF
Y - capacity (for dimensioning isolation guard)	98 + 98	128 + 128	158 + 158	188 + 188	nF
Recommended conductor size U, V, W, HV+, HV-	25	35	50	70	mm ²

Three phase output U, V, W (R, S, T)	DMC514	DMC524	DMC534	DMC544	
Continuous RMS current (I_{ACcont})	112	225	337	450	A
Periodic cycle with max. current 30 s 100%, 90 s 50%	150	300	450	600	A
Continuous power	39	79	118	160	kW
Max. power	52	105	157	212	kW
Efficiency	0.97	0.97	0.97	0.97	---

Thermal & mechanical data	DMC514	DMC524	DMC534	DMC544	
Weight (inclusive coolant medium)	6.5	9.5	12.5	15.5	kg
IP - protection	IP67	IP67	IP67	IP67	---
Coolant quantity in device	0.3	0.6	0.9	1.2	l
Outside diameter of cooling water connection pieces	16	16	16	16	mm
Coolant temperature range at input	- 40 to + 65	- 40 to + 65	- 40 to + 65	- 40 to + 65	°C
Coolant pressure loss @ 6l/min, $T_{coolant} = 25^{\circ}C$ (at mixing ratio water / glycol = 50 / 50)	70	120	150	180	mbar
Max. coolant pressure	1	1	1	1	bar
Ambient temperature range for operation	- 40 to + 85	- 40 to + 85	- 40 to + 85	- 40 to + 85	°C

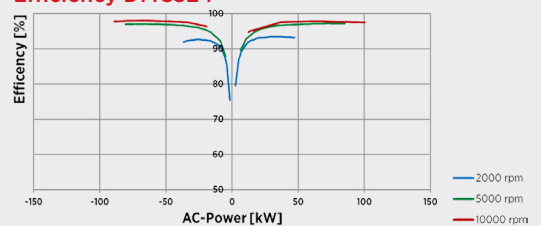
Dimensions



	A	B	
DMC514	250	276	mm
DMC524	360	386	mm
DMC534	470	496	mm
DMC544	580	606	mm



Efficiency DMC524



Efficiency DMC534

