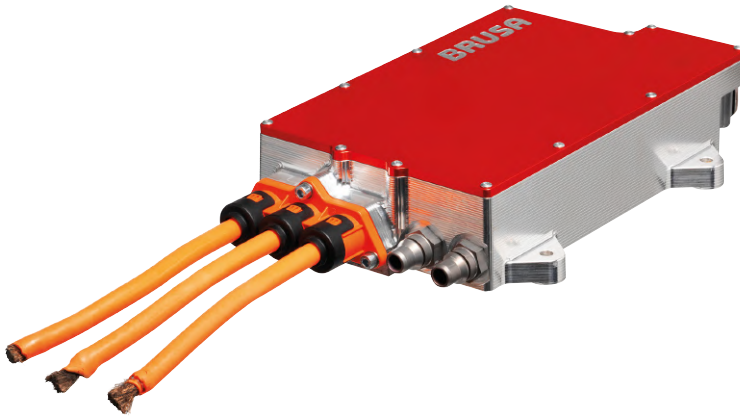




DMC714G - High Speed Inverter

The dependable, flexible standard for electric motors



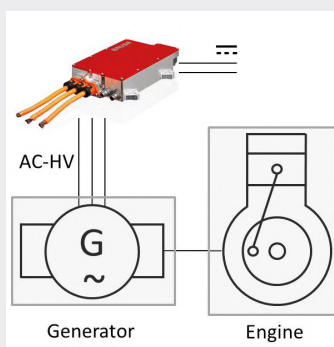
Advanced technology

- Resonant SoftSwing® topology with BRUSA's new mold module for minimal switching losses
- Optimized design for high speed applications up to 180.000 rpm for motors with one pole pair
- Sensorless motor control for pumps, blower, turbines
- Individual programmable motor tables for precise control of electric motors
- Availability of braking via chopper resistor (1 kJ in 2 s)
- Very compact and lightweight design
- CAN interface
- User software CVI in delivery

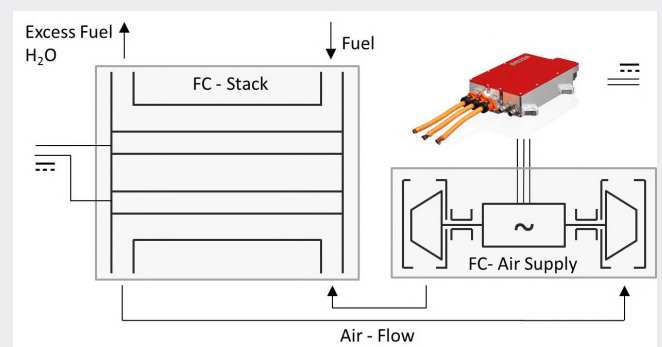
Safe in all respects

- Universal three - phase motor controll
- Passive interlock
- Fully galvanic separation between HV and LV
- High IP-protection

Examples of use



Range Extender Application



Fuel Cell Application



Specifications DMC714G

Power supply HV and LV

	Value	Unit
Low voltage (LV) input range without compromise	-13 - +32	V
Low voltage (LV) input range for operation	8 - 26	V
High voltage input range for operation	150 - 450	V
X - capacity (for pre - charging)	210	μF
Y - capacity (for dimensioning of isolation monitoring unit)	98+98	nF
Recommended conductor size U, V, W, HV*, HV*	25	mm ²

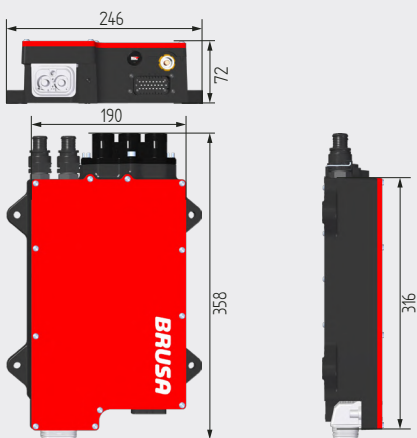
Three phase output U, V, W (R, S, T)

	DMC714G	
Continuous RMS current (I_{Account})	75	A
Periodic cycle with max. RMS current 5 s 100%, 10 s 50% (I_{ACmax})	100	A
Continuous power at 400 V	30	kW
Max. power at 400 V	40	kW
Max. stator frequency	3	kHz
Variable switching frequency	8 - 48	kHz
Efficiency	96	%

Thermal & mechanical data

	DMC714G	
Weight (including cooling water and HV-AC connector with 40 cm cable 25 mm ²)	6.8	kg
IP-protection	IP67	---
Coolant quantity in device	0.3	l
Outside diameter of cooling water connection pieces	17	mm
Coolant temperature range at input	-30 up to +65	°C
Coolant pressure loss at 10 l / min, $T_{\text{coolant}} = 25^{\circ}\text{C}$ (at mixing ratio water / glycol = 50 / 50)	< 100	mbar
Max. coolant pressure	1.4	bar
Ambient operation range temperature	-40 to +85	°C

Dimensions



Efficiency DMC714G

