



## *FRENIC Mini*

Motor capacity between 0.1 and 4.0kW

Simplified torque vector control

High starting torque of 150% and more at 5 Hz

Internal PID control

Breaking chopper included

EMC filter built-in types

Certified according to world-wide standards

# FRN C1E/S-7/4 – the best choice for all-round applications

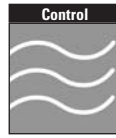


Fuji Electric is one of the leading companies in drive and automation technology. Frequency inverters by Fuji Electric have been displaying their high quality standards and extensive performance spectrum for more than 25 years. The manufacturer's "know-how" and the world-wide availability of Fuji Electric guarantee safe implementation in machinery and systems.



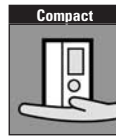
### Simplified torque vector

- High starting torque of 150% and more at 5 Hz
- Optimal control of output torque by adding simplified magnetic flux estimator to V/f control
- On-delay compensation for reduced motor instability at low speed



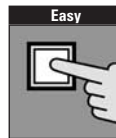
### PID control

- Equipped with an integrated PID regulator to control flow and pressure in fans and pumps



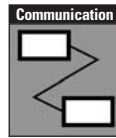
### Compact

- Miniaturization to minimum level in the class
- Line-up to 4.0kW/400V (constant torque)



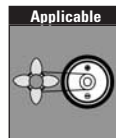
### Simple operation

- On-board potentiometer for on site commissioning
- Controller connections for 0-10V, 0-5V and 4-20mA



### Series communication

- RS485 - connection option for higher automation levels
- Windows software
- Copy function with an external copy unit



### Application

Agitators, separators, conveyor belts, air conditioning systems, fans, pumps, fitness units etc.

## FRN C1E/S-7/4 – General specification

<b>Standard motor rating</b>	<b>kW</b>	0.1	0.75	2.2	0.4	1.5	4.0	
<b>Rated capacity</b>	<b>kVA</b>	0.3	1.9	4.1	1.1	2.8	6.8	
<b>Output voltage</b>	<b>V</b>	3-phase, 0-U <sub>N</sub>						
<b>Nominal current</b>	<b>A</b>	0.8	5.0	11.0	1.5	3.7	9.0	
<b>Overload capability</b>	<b>A</b>	200% for 0.5s., 150% for 1min.						
<b>Input voltage</b>	<b>V</b>	1-phase, 200V – 240V, 50/60Hz			3-phase, 380V – 480V, 50/60Hz			
<b>Voltage/Frequency tolerance</b>		Voltage +10 to –15%, Frequency +5 to –5%						
<b>Protection type</b>		IP20						
<b>Cooling system</b>		Natural	Natural	Fan	Natural	Fan	Fan	
<b>Carrier frequency</b>		0.75 to 15kHz						
<b>Ambient temperature range</b>		–10°C to +50°C (without performance reduction)						
<b>Dimensions *</b>		C1S	120x80x80	120x80x140	180x140x139	130x110x115	130x110x139	180x140x139
<b>LxWxH [mm]</b>		C1E	120x80x100	130x110x139	180x140x182	130x110x158	180x140x182	180x140x182

\* C1E with EMC filter built-in

Distributor:

Fuji Electric FA Europe GmbH  
 Goethering 58  
 63067 Offenbach/M.  
 Germany  
 Tel.: +49 69 66 90 29 - 0  
 Fax: +49 69 66 90 29 - 58  
 www.fujielectric.de  
 info\_inverter@fujielectric.de

