

## Eekels Frequency converters EVE 690/450D - 900D

(400 through 1000 kW)



**model: 450D t/m 650D air-cooled**

### Characteristics of the EVE frequency converters:

- Reliable
- High starting torque
- Quick response time (1ms)
- High efficiency-level of the drive
- Frequency range 0,01 up to 200,00 Hz
- Programmable in- and outputs
- Integrated setpoint PID
- Fieldbus Profibus-DP and Modbus-RTU integrated
- Programming through Modbus / TCP-IP
- Common DC-bus
- Universal control system
- According EnergieNed directive
- Motor sound switching behaviour
- Deliverable in standard cabinet systems
- Dynamic control
- Attractive price performance ratio



**model: 675D - 900D direct water-cooled**

EVE frequency converters are equipped with the most modern techniques. Functionality of the converters is based on more than 25 years of experience in design, production and applying frequency controlled drives. Each converter is equipped with a control system that converts a standard squirrel cage motor into a perfect adjustable drive.

Eekels, as the manufacturer of the frequency converters, can add hard and software modules to customise the drive.

The standard frequency converter supports many applications, such as: paper machines, cranes, centrifuges, fans etc.

Besides products and systems Eekels also implements Turn Key drive projects.



### Product range drive technology:

- Frequency converters up to 2,6 MW/690V/12P
- Bi-directional supply units and choppers
- SR-speed control (0,01%)
- Soft starters
- Motors



## Technical specifications

EVE690/ . . .	450D(W)		570D(W)		650D(W)		740D(W)		900D(W)	
duty class	II	I	II	I	II	I	II	I	II	I
max. motor output	400 kW	500 kW	500 kW	630 kW	630 kW	710 kW	710 kW	800 kW	800 kW	1000 kW
max. output current	417 A	510 A	510 A	642 A	642 A	725 A	746 A	839 A	894 A	1005 A
overload (60s)	150 %	120 %	150 %	120 %	150 %	120 %	150 %	120 %	150 %	120 %
manufacturer	EEKELS ELEKTROTECHNIEK B.V.									
input line voltage	3 x 690V +10 - 15%									
input line frequency	50/60 Hz									
line current	370 A	462 A	462 A	582 A	582 A	656 A	656 A	831 A	924 A	1016 A
cos phi	ca. 0,96									
output line voltage	3 x 0-690V									
frequency range	0-100,00Hz / 0-200,00Hz									
efficiency	higher than 98%									
max. power loss	6,5 kW	7,5 kW	7,5 kW	9,5 kW	9,5 kW	10,7 kW	10,7 kW	12 kW	12 kW	13.5 kW
air flow [m3/h] (type D)	1600	1600	1600	1600	3200	3200	4800	4800	4800	4800
water flow [m3/h] (type DW)	0,8	0,92	0,92	1,16	1,16	1,31	1,31	1,47	1,47	1,65
max. ambient temp.	40°C (up to 50°C with reduction)									
degree of protection	IP-22 (type D) ,IP-54 (type DW)									
max. length motor cable	150 m (> 150m optional)									
communication	Profibus-DP, MODBUS-RTU, Ethernet TCP/IP									
interference protection	IEC 61800-3 (EN 55011 optional)									
line disturbance	According Energiened directive with internal AC-choke									
mass	530 kg		550 kg		950 kg		1000 kg		1100 kg	
dim. type D (hxwx) mm	2365x800x600		2365x800x600		2365x1600x600		2365x1600x600		2365x1600x600	
dim. type DW (hxwx) mm*	2100x800x600		2100x800x600		2100x800x600		2100x1600x600		2100x1600x600	

Available types:

380V through 690V / 6 and 12 puls / DC, 50 and 60Hz

\*dimensions without cooling unit

type: EVE690/900D

