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Centralized washing system Medium Pressure from 20 to 40 Bar

Modula Smart is the best solution for medium pressure washing. The combination of high efficiency electric motor and inverter, combined with a selection of top quality components and components specifically designed by **VEMA**, has resulted in a highly versatile system with variable speed pump units.

The heart of the control module consists of a **PLC**.

Integration with 4/20 mA pressure, flow rate and temperature transducers and various control sensors, with a control software developed entirely by the **VEMA** technical team complete the system, making it completely independent in both operation and safety functions.

Modula Smart is therefore **VEMA's** solution to the problem of energy waste, enabling the electrical power consumed to be modulated according to the mechanical demand of the motor shaft.

Particularly in the presence of discontinuous loads, this improves energy efficiency, obtaining:

- **Energy savings as high as 30-40%** depending on load;
- **More rational use of the motor**, increasing its working life;
- **Less heat dissipated by the electric motor**;
- **Less vibration on start up** and operation of the pump assembly, thanks to modulation of power in relation to the flow rates required;
- **Electrical circuit optimised** in both the transient and full-load current drawn;
- **The inverter ensures a return on investment generally in less than 24 months**;
- **The possibility of reducing the operating speed in fluidodynamic machines** when the nominal speed (50 Hz) is not required also reduces mechanical wear and considerably lowers energy consumption as the relationship between absorbed power and speed is cubic and a slight reduction in Hz therefore means a considerable reduction in kW consumed.

For different flow rate and pressure requirements contact our technical office who will always be happy to discuss and analyse the most feasible solution for your specific needs.

Available in 4.0
Configuration



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Available configurations

Models without tank (*Version without inverter)

MODEL	MAX. FLOW RATE (lt/min)	NUMBER OF PUMPS	PRESSURE (Bar)	POWER (kW)	RPM	DIMENSIONS (LxHxP) mm	MAX.IN-LET TEMP.	MAX. N° OF USERS
10.3500.00*	2 x 100	2	25	11	2900	800x1800x700	90°C	7
10.3971.00*	2 x 200	2	20	15	2900	800x1800x700	90°C	14
10.3974.00	2 x 50	2	50	15	5500	800x1800x700	90°C	4
10.1754.00	2 x 75	2	40	15	4800	800x1800x700	90°C	6
10.2979.00	3 x 75	3	40	22,5	4800	1175x1800x700	90°C	9
10.3976.00	4 x 75	4	40	30	4800	1480x1800x700	90°C	12

Models with tank (*Version without inverter)

MODEL	MAX. FLOW RATE (lt/min)	NUMBER OF PUMPS	PRESSURE (Bar)	POWER (kW)	RPM	DIMENSIONS (LxHxP) mm	MAX.IN-LET TEMP.	MAX. N° OF USERS
10.3501.00*	2 x 100	2	25	11	2900	1600x1800x700	90°C	7
10.3973.00*	2 x 200	2	20	15	2900	1600x1800x700	90°C	14
10.3975.00	2 x 50	2	50	15	5500	1600x1800x700	90°C	4
10.1728.00	2 x 75	2	40	15	4800	1600x1800x700	90°C	6
10.0579.00	3 x 75	3	40	22,5	4800	2100x1800x700	90°C	9
10.3977.00	4 x 75	4	40	30	4800	2310x1800x700	90°C	12

Technical features

- Low voltage controls (24 volt)
- Pressure adjustment
- Automatic water flow adjustment
- Setting of all the parametres by PLC
- Operating Software created by Vema
- Setting of all the parametres by PLC
- PID system for the pump pressure control
- Transducer of pressure 4/20 mA

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Technical features

- Electronic flow sensor
- Contemporary use of more lances at the same time
- Automatic switch off of the pump if not used
- Automatic switch off of the pump if not used
- Possibility to have different pressure and flow in different wa-shing zones
- Water lack control
- Over temperature safety control
- Additiona safety control on the entire system
- Control and temperature adjustment (Optional)
- IP65 electric control panel
- IP65 S/s electric control panel (Optional)
- Impeller pumps with integrated inverter
- water storage tank and centrifugal pump (Optional)
- S/s frame.
- Available in 4.0 configuration

Optional accessories



S/s washing lave cm 90 without nozzle Complete of S/s
male quick coupling (cm 70)

Sec. 9.4 - (cm 70) Cod. 10.5598.00 - (cm 90) Cod. 10.0996.00



S/s foam lance 30 complete of noz
zle and S/s male quick coupling

Sec 9.8 - Cod. 10.0995.00



S/s nozzle 1/4"

Sec. 9.7



H.P Swivel gun 1/2"

Sec 9.9 - Cod. 40.2039.00



FOODJET 1/2 "80 Bar
hose 20/25/30 mt.

Sec 9.10 - Cod. 10.1082.00

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Optional accessories



Stainless steel SUT plug with
straight jet nozzle
and protective cover
Sec. 9.7 - Cod. 10.4954.00



S/S stainless steel
manual hose reel
Sec. 9.2 - Cod. 10.4153.00



S/S Automatic hose reel
high pressure 20 mt
Sec. 9.1 - Cod. 10.5077.00



Quick coupling and fittings
Sec. 9.11



Wide range of foam dispenser stations - Stationary and mobile
Sec. 7



Stainless steel wall holder for lances
with Ø 14 pin
Sec. 9.17 Cod. 20.0559.06



S/s Ball valve 1/2" F.F Lever Max
150 Bar (Sun WP)
Sec. 9.15 - Cod. 40.2101.00



300 Lt plastic feeding tank complete
with controls and pump - S/s frame
Sez. 9.16 - Cod. 10.3962.00 (150 lt)
Cod. 10.3891.00 (200 lt)
Cod. 10.3960.00 (300 lt)
Cod. 10.3961.00 (400 lt)