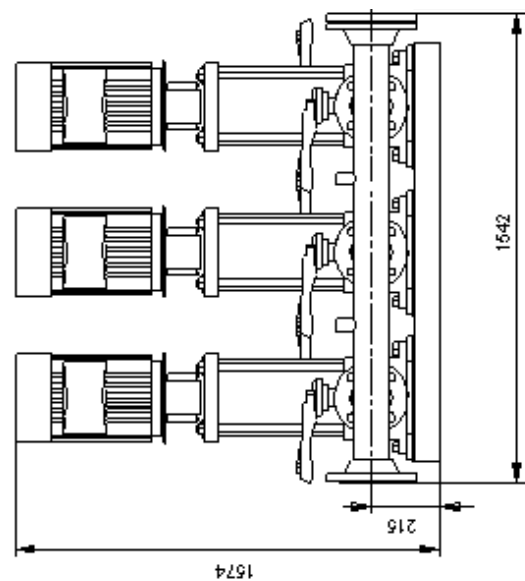
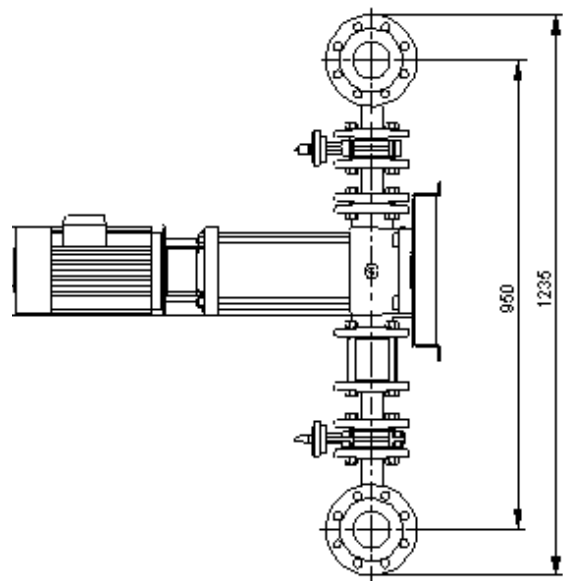


KATALOŠKI MATERIJAL PUMPI CRPNE STANICE "KULA" - BUSOVAČA

 EU funded project Projekat finansira Europska Unija		 WYG International part of the WYG group creative minds safe hands	
Client/Klient		Consultant/Konsultant	
INFRASTRUCTURE PROJECTS FACILITY IN THE WESTERN BALKANS		WYG INTERNATIONAL UK	 INSTITUT ZA HIDROTEHNIKU GRADEVINSKOG FAKULTETA U SARAJEVU
Project/Projekat			
REGIONALNI SISTEM VODOSNABDIJEVANJA PLAVA VODA			
Project status/Tip Projekta	Drawing date /Datum crteža: 09.06.2011. Drawing approved/Crtež odobren: 24.09.2011.	Drawing status /Status Crteža FINAL	Drawing scale/Mjerilo crteža (Priloga)
GLAVNI PROJEKT			Format A3(420/297 mm)
Drawing name/Ime Priloga	Prepared by:		Drawing no/ Prilog broj
KATALOŠKI MATERIJAL PUMPI CRPNE STANICE "KULA" - BUSOVAČA	 INSTITUT ZA HIDROTEHNIKU GRADEVINSKOG FAKULTETA U SARAJEVU Stjepana Tomića 1, Sarajevo, Bosna i Hercegovina Tel./Fax: 21 24 66/67; 20 44 95; PB: 405; E-mail: hies@hesi.com.ba ID broj: 4200689/1003, PDV broj: 25000991003, Broj upisa u sudski registar: 16/111063		4.28.4
		Sheet/List	Of/Od
		1	7

95124975 HYDRO MPC-S /P 3CR 32-06 3x400/50 SD 50 Hz

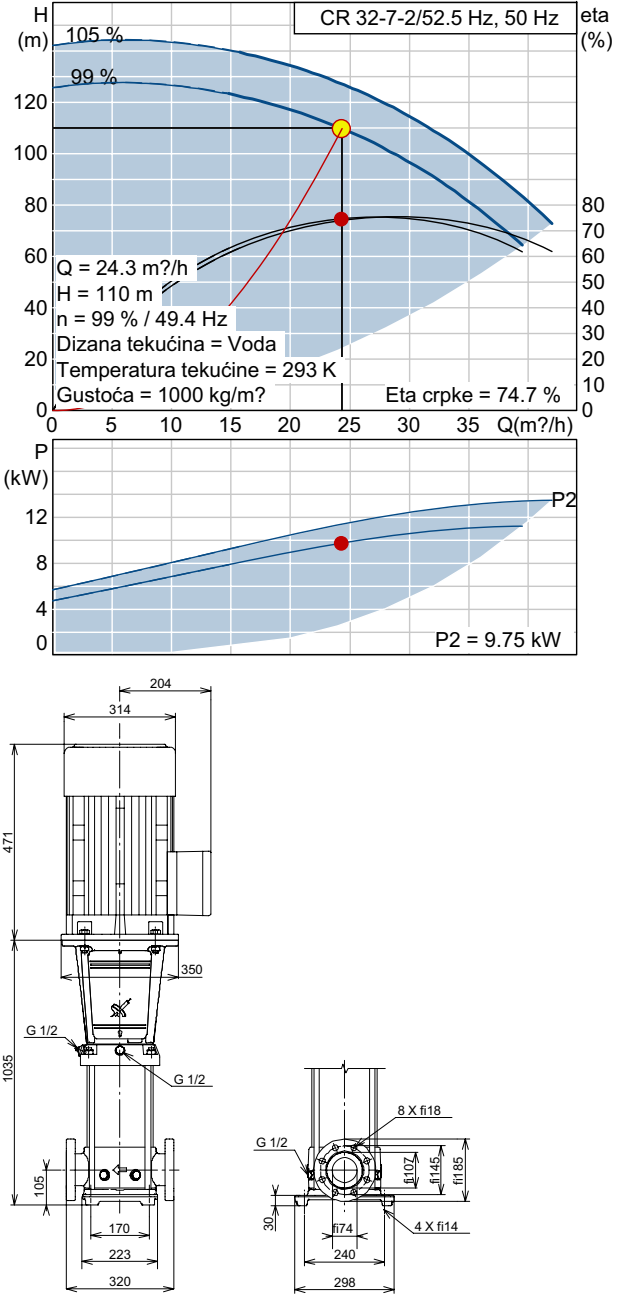


Pozor! Sve jedinicesu u [mm] ukoliko nije navedeno drugačije.
Upozorenje: Ovaj pojednostavljeni ortežs dimenzijama ne prikazuje sve detalje.

Položaj	Kol.	Opis	Pojedinačna cijena
	1	CR 32-7-2 A-F-A-E HQQE  Pozor! Slika proizvoda se može razlikovati od stvarnog proizvoda Proizvodni broj: 96122018 Okomita, višestupanjska, in-line, centrifugalna crpka za instaliranje u cjevovode i montažu na betonski temelj. Nije samousisna. Crpka ima sljedeće karakteristike: - rotor i međukomore su od Nehrđajući čelikDIN W.-Nr. 1.4301; - glava crpke i donji dio od Lijevano željezo; - brtva vratila ima ugradnu duljinu prema EN 12756; - prijenos snage je preko dvodijelne spojke od lijevanog željeza; - spajanje cjevovoda pomoću DINprirubnica. Motor je 3-fazni AC motor. Liquid: Liquid temperature range: 243 .. 393 K Temp. tekućine: 293 K Technical: Speed for pump data: 2923 rpm Stvarno izračunani protok: 24.3 m³/h Postignuta visina dizanja crpke: 110 m Brtva vratila: HQQE Tolerancija krivulje: ISO 9906 Annex A Materijali: Kućiste crpke: Lijevano željezo EN-JS1050 ASTM 80-55-06 Impeler: Nehrđajući čelik DIN W.-Nr. 1.4301 AISI 304 Installation: Maksimalna temperatura okoline: 333 K Max pressure at stated temp: 16 bar / 120 °C 16 bar / -30 °C Standardna prirubnica: DIN Cijevni spoj: DN 65 Tlačna faza: PN 16 / PN 25 / PN 40 Veličina prirubnice za motor: FF300 Electrical data: Tip motora: 160MD Klasa efikasnosti: 1 Broj polova: 2 Potrebna snaga - P2: 15 kW Power (P2) required by pump: 15 kW	Cijena na upit

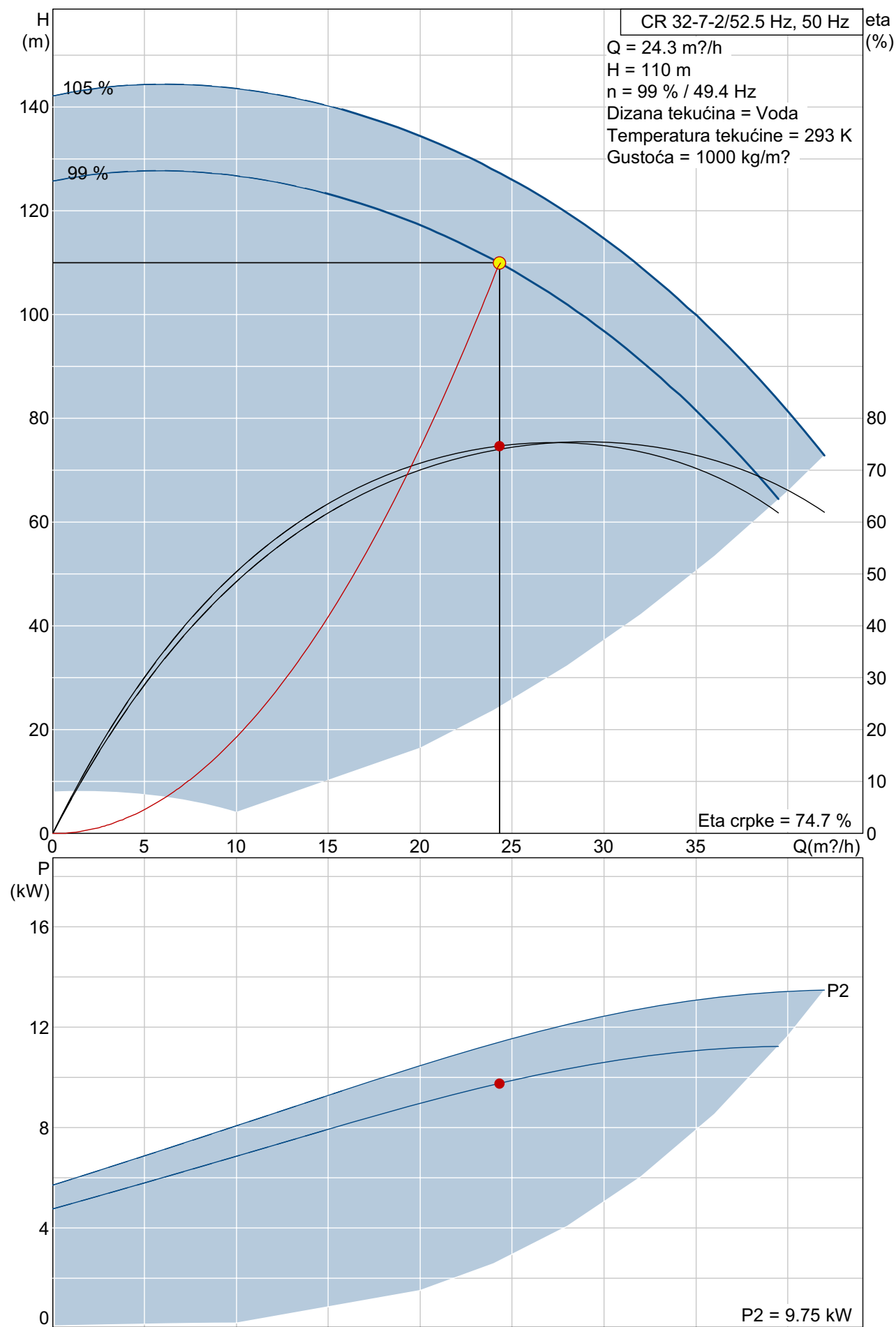
Položaj	Kol.	Opis	Pojedinačna cijena
		Frekvencija struje: 50 Hz Potrebni napon: 3 x 380-415 D / 660-690 Y V Nazivna struja: 28,5-26,0 / 16,2-15,6 A Starting current: 660-780 % cos fi - faktor snage: 0,91-0,90 Nazivna brzina: 2920-2940 rpm Efikasnost motora uz puno opterećenje: 91,2-92,3 % Učinkovitost motora pri 3/4 opterećenja: 93,0 % Učinkovitost motora pri 1/2 opterećenja: 93,5-92,5 % Klasa zaštite (IEC 34-5): 55 (Protect. water jets/dust) Klasa izolacije (IEC 85): F Others: Neto masa: 165 kg Bruto masa: 198 kg Transportni volumen: 0.51 m3	

Opis	Vrijednost
Ime proizvoda::	CR 32-7-2 A-F-A-E HQQE
Proizvodni br.::	96122018
EAN broj::	5700396680620
Price:	Na zahtjev
Technical:	
Speed for pump data:	2923 rpm
Stvarno izračunani protok:	24.3 m³/h
Postignuta visina dizanja crpke:	110 m
Impeler:	7
Impeler reducirani:	2
Brtva vratila:	HQQE
Tolerancija krivulje:	ISO 9906 Annex A
Stupnjevi:	7
Verzija crpke:	A
Model:	A
Materijali:	
Kućište crpke:	Lijevano željezo
	EN-JS1050
	ASTM 80-55-06
Impeler:	Nehrđajući čelik
	DIN W.-Nr. 1.4301
	AISI 304
Kôd za materijal:	A
Kôd za gumu:	E
Installation:	
Maksimalna temperatura okoline:	333 K
Max pressure at stated temp:	16 bar / 120 °C
	16 bar / -30 °C
Standardna priрубnica:	DIN
Kôd za povezivanje:	F
Cijevni spoj:	DN 65
Tlačna faza:	PN 16 / PN 25 / PN 40
Veličina priрубnice za motor:	FF300
Liquid:	
Liquid temperature range:	243 .. 393 K
Temp. tekućine:	293 K
Electrical data:	
Tip motora:	160MD
Klasa efikasnosti:	1
Broj polova:	2
Potrebna snaga - P2:	15 kW
Power (P2) required by pump:	15 kW
Frekvencija struje:	50 Hz
Potrebni napon:	3 x 380-415 D / 660-690 Y V
Nazivna struja:	28,5-26,0 / 16,2-15,6 A
Starting current:	660-780 %
cos fi - faktor snage:	0,91-0,90
Nazivna brzina:	2920-2940 rpm
Efikasnost motora uz puno opterećenje:	91,2-92,3 %
Učinkovitost motora pri 3/4 opterećenja:	93,0 %
Učinkovitost motora pri 1/2 opterećenja:	93,5-92,5 %
Klasa zaštite (IEC 34-5):	55 (Protect. water jets/dust)
Klasa izolacije (IEC 85):	F
Zaštita motora:	PTC
Broj motora:	85D17526
Others:	
Neto masa:	165 kg
Bruto masa:	198 kg
Transportni volumen:	0.51 m3

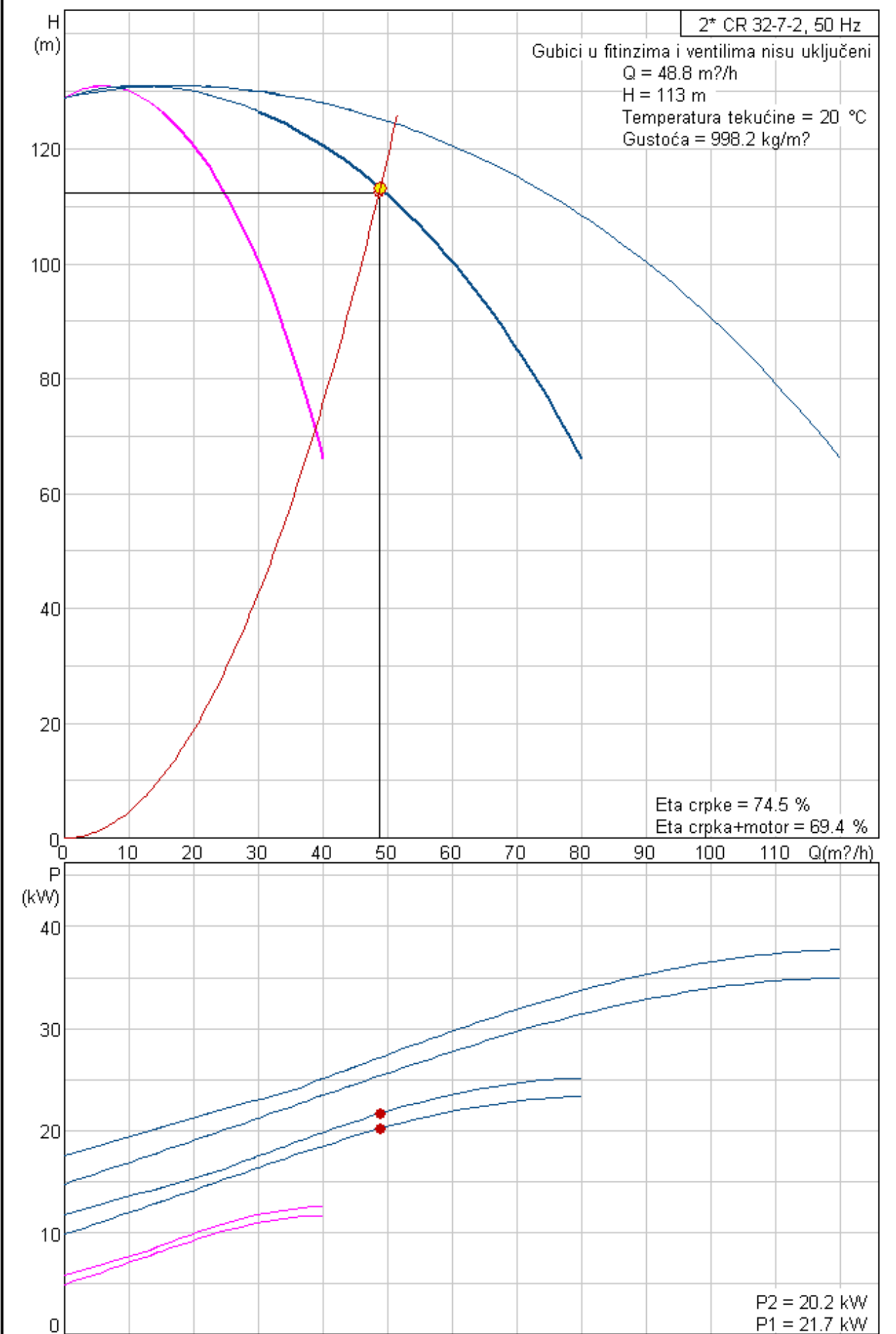


Nije standardna oprema proizvođača, nego se sklapa od pojedinačni pumpi zahtjevanim od strane korisnika.

96122018 CR 32-7-2 50 Hz

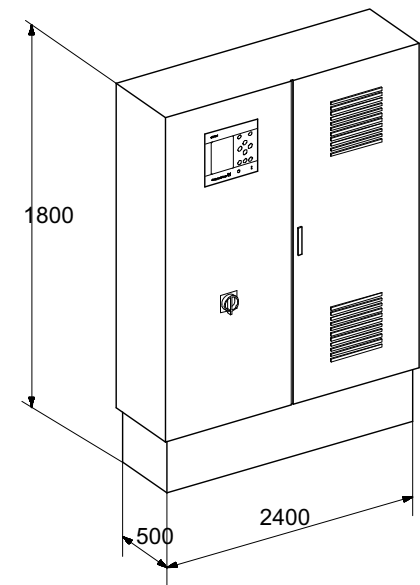


96122018 CR 32-7-2 50 Hz

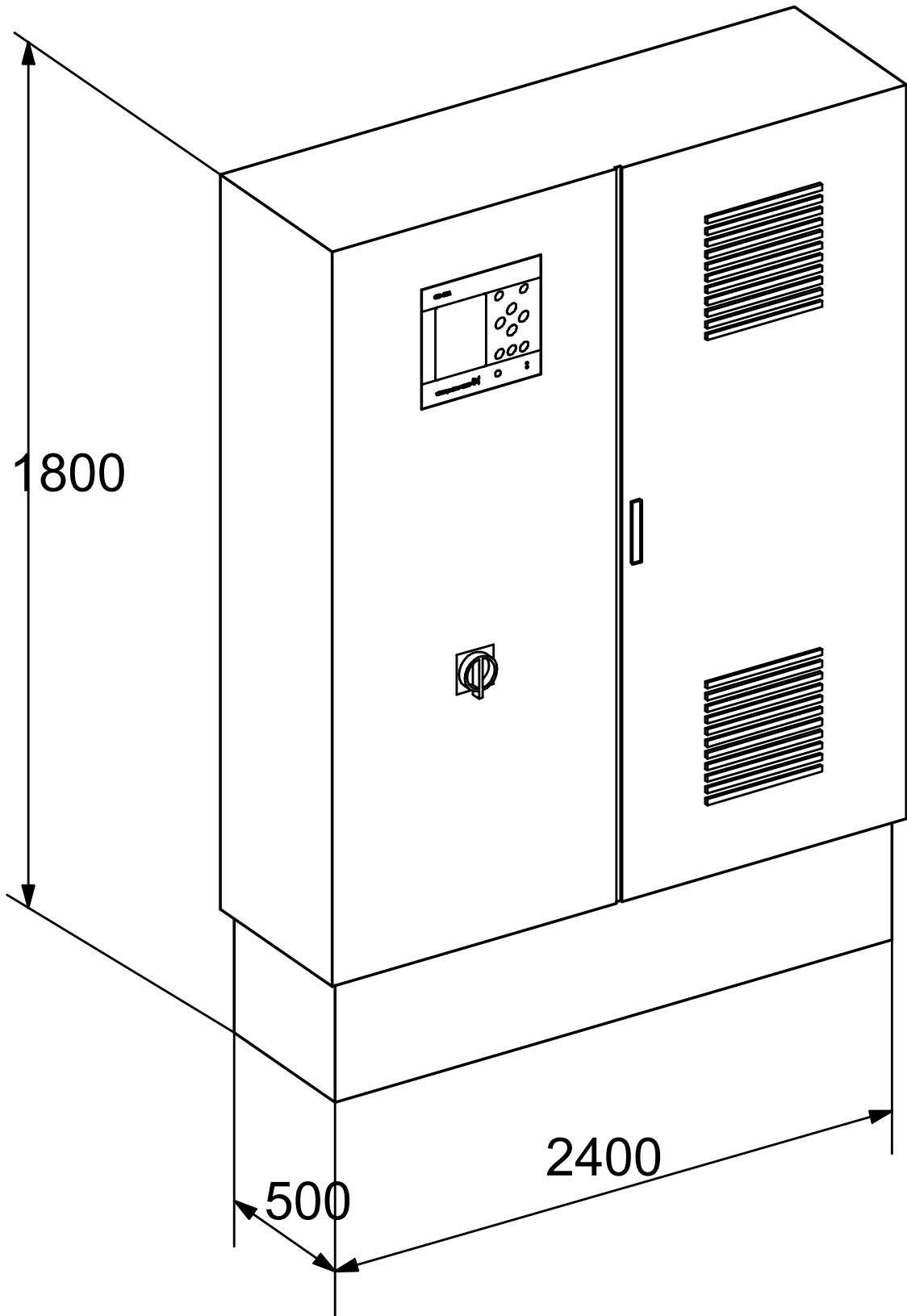


Position	Qty.	Description	Single Price
		- Pump test run (prevents pumps from seizing up and liquid from decaying in pumps, and removes trapped air) - Pilot pump (control of pilot-pump operation in low-flow situations) - option - Pump stop attempt (automatic stop attempts, self-learning or at fixed intervals) - Pump start and stop speeds (control of start and stop speeds of pumps) - Min. performance (selection of minimum performance) - Compensation for pump start-up time (compensation for the time it take a mains-operated pump to reach full performance) - Stop function (stop of the last pump in operation during low-flow situations) - Soft pressure build-up (ensures smooth start-up of systems with empty pipes) - Emergency run (pumps keep running regardless of warnings and alarms) - Setting of digital inputs - Setting of analog inputs - Setting of digital outputs - Setting of min., max. and user-defined duty - Pump curve data (entering of data describing the performance curves) - Control source (control from CU 351 or via bus connection) - Fixed inlet pressure (setting of fixed inlet pressure) - Flow estimation (optimisation of operation according to performance curves) - Dry-running protection (with pressure/level switch, pressure transmitter or level transmitter) - Min. pressure (monitoring of minimum pressure) - Max. pressure (monitoring of maximum pressure) - External fault (monitoring of external fault) - Limit exceeded 1 and 2 (monitoring of a set limit 1 (warning limit) and limit 2 (alarm limit)) - Pumps outside duty range (indication of whether pumps fall outside duty range) - Pressure relief function (monitoring of maximum system pressure) - option - Display language (selection of display language) - Display units (SI or US units) - Date and time (setting of day and time) - Passwords (setting of password for menu ?Operation? and/or ?Settings?) - Ethernet connection (controlling the system from a remote PC) - GENIbus number (allocation of GENIbus number) - Software status (status of software version). Control MPC was designed according to these directives: - Machinery Directive (98/37/EC) Standards used: EN 809 [2000] and EN 60204-1 [2006]. - EMC Directive (2004/108/EC) Electrical data: Power (P2) main pump: 37 kW Mains frequency: 50 Hz Rated voltage: 3 x 400 V, 50 Hz, PE Rated voltage main pump: 3 x 400 V Starting main: frequency converter Rated current of system: 216 A Current range main pump: 64.1 .. 72 A Enclosure class (IEC 34-5): IP54 Mains cable: 4x120..150 mm2 Radio interference supression: EMC Certificate - Control MPC 1 [2007] Others: Net weight: 475 kg Gross weight: 625 kg Language: GB Standard: IEC	

Description	Value
Product name:	Control MPC-F 3x37 SD
Product No:	96016615
Technical:	
Number of pumps:	3
Electrical data:	
Power (P2) main pump	37 kW
Mains frequency:	50 Hz
Rated voltage:	3 x 400 V, 50 Hz, PE
Rated voltage main pump	3 x 400 V
Starting main:	frequency converter
Rated current of system	216 A
Current range main pump	64.1 .. 72 A
Enclosure class (IEC 34-5):	IP54
Mains cable	4x120..150 mm2
Cable size:	7x10..16 mm2 shielded
	2x0.5 mm2
Radio interference supression:	EMC Certificate - Control MPC 1 [2007]
Controls:	
Control type:	F
Provision:	floor standing
Operation unit:	CU 351
Others:	
Net weight:	475 kg
Gross weight:	625 kg
Language:	GB
Standard:	IEC
Epstan version:	V5.0841



96016615 Control MPC-F 3x37 SD 50 Hz



Note! All units are in [mm] unless others are stated.
Disclaimer: This simplified dimensional drawing does not show all details.