# **IDEA**





**C** €

### **GENERAL DATA**

#### **Applications**

Single-impeller peripheral borehole pump for 4" wells or larger, capable of providing high heads with limited power. Suitable for water lifting and distribution applications in domestic systems, small agricultural concerns, pressurisation of pressure vessels and DIY uses.

#### **Pump construction features**

Pump body and motor support in cast iron.

Brass impeller.

Impeller shaft extension and strainer in stainless steel.

#### **Motor construction characteristics**

Submergible asynchronous two-pole motor, made entirely of stainless steel, dry design with external cooling by means of pumped liquid.

Canned-type AISI 304L stator

Squirrel cage rotor running on ball bearings, oversized to ensure reliability and durability

Graphite/alumina mechanical seal and lip seal

In the single phase version the start capacitor is enclosed in a rugged, electrically insulated high-density plastic enclosure.

Overload protection to be provided by the user for the three-phase version.

Protection rating: IP 68 Insulation class: F

Standard input voltage: single phase 230 V / 50 Hz

three-phase 400 V/ 50 Hz

Removable H07RN-F power cable, length 15 m.

Supplied with 15 m of nylon rope



# **TECHNICAL DATA**

No.	PART*	MATERIAL
1	CABLE	H07 RNF CEI 20-19
2	IMPELLER	BRASS PCuZn40Pb2 UNI 5705
3	SUPPORT	CAST IRON G20 UNI 5007 (Epoxy electrocoat)
4	MECHANICAL SEAL	GRAPHITE/ALUMINA
5	SHAFT WITH ROTOR	STAINLESS STEEL AISI 431 X17CrNi16 2 UNI 10088-3
6	MOTOR	STAINLESS STEEL AISI 304L X2CrNi19 11 UNI 10088-3
7	CAPACITOR CARTRIDGE	Noryl 20% fibreglass

<sup>\* •</sup>In contact with liquid.

- Operating range: from 0.4 to 2.4 m³/h with head of up to 52 m.

- Liquid quality requirements: clean, free of solid or abrasive contaminants, non-viscous, non-aggressive, not crystallised

and chemically neutral,

close to the properties of water.

- Liquid temperature range: from 0°C to +35°C

- Max. immersion depth: 20 m - Input voltage tolerance: +6% / -10%

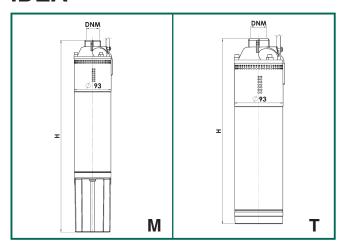
- Max. no. of starts: 20/h

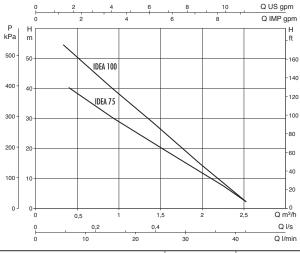
- Installation: in 4" wells or larger, tanks and cisterns, vertical position.

- Special executions on request: alternative voltages and/or frequencies.

The performance curves are based on kinematic viscosity values = 1 mm $^{2}$ /s and density equivalent to 1000 kg/m $^{3}$ . Tolerance of curves to ISO 9906.

## **IDEA**





MODEL	Ø	Н	DNM	P.	ACK DIMENSIONS (m	VOLUME	GROSS WEIGHT	
MIODEL				L/A	L/B	Н	m³	Kg
IDEA 75 M	93	482	1" G	630	265	125	0,0208	10,5
IDEA 100 M	93	512	1" G	630	265	125	0,0208	12
IDEA 75 T	93	353	1" G	420	310	118	0,0153	10,2
IDEA 100 T	93	383	1" G	420	310	118	0,0153	11,7

	ELECTRICAL DATA						HYDRAULIC DATA (n ~ 2800 1/min)									
MODEL	INPUT VOLTAGE 50 Hz	P1 MAX kW	P2 NOMINAL		In	CAPACITOR		Q m³/h	0,4	0,6	0,9	1,2	1,5	1,8	2,1	2,4
			kW	HP	A	μF	Vc	l/min	7	10	15	20	25	30	35	40
IDEA 75 M	1x230 V ~	0,8	0,55	0,75	4	16	450		39	37	32	27,6	22,5	17,6	12,2	6,8
IDEA 100 M	1x230 V ~	1,1	0,75	1	4,7	20	450	Н	52	48,3	41,4	34,6	28	21,2	14,4	7,3
IDEA 75 T	3x400 V ~	0,65	0,55	0,75	1,5	-	-	(m)	39	37	32	27,6	22,5	17,6	12,2	6,8
IDEA 100 T	3x400 V ~	1,1	0,75	1	2,3	_	_	]	52	48,3	41,4	34,6	28	21,2	14,4	7,3

