

## Special Motor For Vertical Multi Stage Pump



**H71~132**

**Aluminum Frame**



**H160~315**

**Cast Iron Frame**

### Overview:

Our company has researched and developed full series vertical motor for multistage pump, which conforms to the standard of IEC Level 3 (YE3 Series) and Energy Efficiency Level 2 (YXL and YX3 Series). The exterior of the motor manages to get the Design Patent granted by State Intellectual Property Office of the People's Republic of China. This series of motor has been successfully used in many domestic multistage pump manufacturing enterprises, as well exported to various regions as European Union, Japan and Taiwan.

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|--------------------------------|-----------------------------|
| • Frame sizes: 71 to 315       | Rated output: 0.37 to 220kW |
| • Voltage: 380V or other       | Frequency: 50Hz or 60 Hz    |
| • Duty Cycle: S1               | Insulation class: F         |
| • Degree of protection: IP55   | Number of poles: 2          |
| • Efficiency levels: IE2 / IE3 | Enclosure: IC411            |

### Product features :

- Main Features: Elegant Appearance, low noise in start and operation, meet the requirement of bi-axial force.
- Used with the multistage pump, the motor's wide application ranges in the supply water pressurizing of high building, water delivery in long distance or in the situation when the pressure boost by large pressure equipment is needed, meeting the need of living water supply of residential areas、 large architectural complex (like school、 army、 large factory etc.) and villa-cluster; the motor can be also applied in the refrigeration system of air-conditioner and fire-fighting supercharging of commercial building complex; in pressurizing of waterworks from long distance; or be used to suction clean water from construction site.
- Installation dimension and Energy Efficiency conform strictly to the standard of IEC and DIN42673,

- Protection Class IP55; cast iron frame prevent the motor from dust and splash; optimum structure; in compliance with international standard, safe in operation.
- Insulation Class F, strong heat resistance and shock resistance, long life span of insulation, be able to work in severe environment.
- Standardization design, high quality material, advanced processing equipment and perfect quality assurance system, significant energy saving, little vibration, low noise, steady performance and reliable.

### Performance Data

**380V 50Hz**

IEC Energy Efficiency 3 level ( GB18613-2012 Energy Efficiency 2 level——YE3 Series)

Model	Output kW	FLA	RPM	Eff. %	Power Factor	FLT N.m	$\frac{LRT}{FLT} \frac{Tst}{T_N}$	$\frac{LRA}{FLA} \frac{Ist}{I_N}$	$\frac{BDT}{FLT} \frac{Tmax}{T_N}$	dB(A)
Synchronous speed						3000 r/min				
YE3-71M1-2	0.37	1.0	2740	69.0	0.81	1.29	2.2	6.1	2.2	62
YE3-71M2-2	0.55	1.4	2740	72.3	0.82	1.92	2.2	6.1	2.2	62
YE3-80M1-2	0.75	1.7	2870	80.7	0.82	2.50	2.2	7.0	2.3	62
YE3-80M2-2	1.1	2.4	2875	82.7	0.83	3.65	2.2	7.3	2.3	62
YE3-90S-2	1.5	3.2	2880	84.2	0.84	4.97	2.2	7.6	2.3	67
YE3-90L-2	2.2	4.6	2880	85.9	0.85	7.30	2.2	7.6	2.3	67
YE3-100L-2	3	6.0	2880	87.1	0.87	9.95	2.2	7.8	2.3	74
YE3-112M-2	4	7.8	2915	88.1	0.88	13.1	2.2	8.3	2.3	77

YE3-132S1-2	5.5	10.6	2935	89.2	0.88	17.9	2.0	8.3	2.3	79
YE3-132S2-2	7.5	14.4	2930	90.1	0.88	24.4	2.0	7.9	2.3	79
YE3-160M1-2	11	20.6	2950	91.2	0.89	35.6	2.0	8.1	2.3	81
YE3-160M2-2	15	27.9	2945	91.9	0.89	48.6	2.0	8.1	2.3	81
YE3-160L-2	18.5	34.2	2945	92.4	0.89	60.0	2.0	8.2	2.3	81
YE3-180M-2	22	40.5	2950	92.7	0.89	71.2	2.0	8.2	2.3	83
YE3-200L1-2	30	54.9	2965	93.3	0.89	96.6	2.0	7.6	2.3	84
YE3-200L2-2	37	67.4	2965	93.7	0.89	119	2.0	7.6	2.3	84
YE3-225M-2	45	80.8	2965	94.0	0.90	145	2.0	7.7	2.3	86
YE3-250M-2	55	98.5	2975	94.3	0.90	177	2.0	7.7	2.3	89
YE3-280S-2	75	134	2975	94.7	0.90	241	1.8	7.1	2.3	91
YE3-280M-2	90	160	2975	95.0	0.90	289	1.8	7.1	2.3	91
YE3-315S-2	110	195	2985	95.2	0.90	352	1.8	7.1	2.3	92
YE3-315M-2	132	234	2985	95.4	0.90	422	1.8	7.1	2.3	92
YE3-315L1-2	160	279	2985	95.6	0.91	512	1.8	7.2	2.3	92
YE3-315L-2	185	323	2985	95.7	0.91	592	1.8	7.2	2.3	92
YE3-315L2-2	200	349	2985	95.8	0.91	640	1.8	7.2	2.2	92

YE3-315L3-2	220	383	2985	95.8	0.91	704	1.8	7.2	2.2	92
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1) Performance data here is for reference, detail data should subject to the data on nameplate

2) Performance data here is based on 380V/50Hz; motors by other voltage can be customized.

IEC Energy Efficiency 2 level ( GB18613-2012 Energy Efficiency 3 level——YXL、YX3 Series)

Model	Output kW	FLA	RPM	Eff. %	Power Factor	FLT N.m	$\frac{LRT}{FLT} \frac{Tst}{T_N}$	$\frac{LRA}{FLA} \frac{Ist}{I_N}$	$\frac{BDT}{FLT} \frac{Tmax}{T_N}$	dB(A)
Synchronous speed 3000 r/min										
YXL series (aluminum frame)										
YXL71M1-2	0.37	1.0	2740	69.0	0.81	0.63	2.2	6.1	2.2	62
YXL71M2-2	0.55	1.4	2740	72.3	0.82	0.88	2.2	6.1	2.2	62
YXL80M1-2	0.75	1.8	2855	77.4	0.82	2.51	2.2	7.0	2.3	62
YXL80M2-2	1.1	2.5	2870	79.6	0.83	3.66	2.2	7.3	2.3	62
YXL90S-2	1.5	3.3	2865	81.3	0.84	5.00	2.2	7.6	2.3	67
YXL90L-2	2.2	4.7	2870	83.2	0.85	7.32	2.2	7.6	2.3	67
YXL100L-2	3	6.2	2875	84.6	0.87	10.0	2.2	7.8	2.3	74
YXL112M-2	4	8.0	2910	85.8	0.88	13.1	2.2	8.3	2.3	77
YXL132S1-2	5.5	10.9	2935	87.0	0.88	17.9	2.0	8.3	2.3	79
YXL132S2-2	7.5	14.5	2930	88.1	0.89	24.4	2.0	7.9	2.3	79
YX3 series (cast iron frame)										
YX3-160M1-2	11	21.0	2950	89.4	0.89	35.6	2.0	8.1	2.3	81
YX3-160M2-2	15	28.4	2945	90.3	0.89	48.6	2.0	8.1	2.3	81
YX3-160L-2	18.5	34.7	2945	90.9	0.89	60.0	2.0	8.2	2.3	81
YX3-180M-2	22	41.1	2950	91.3	0.89	71.2	2.0	8.2	2.3	83
YX3-200L1-2	30	55.7	2960	92.0	0.89	96.8	2.0	7.6	2.3	84
YX3-200L2-2	37	68.3	2960	92.5	0.89	119	2.0	7.6	2.3	84
YX3-225M-2	45	82.7	2965	92.9	0.89	145	2.0	7.7	2.3	86
YX3-250M-2	55	101	2970	93.2	0.89	177	2.0	7.7	2.3	89
YX3-280S-2	75	137	2975	93.8	0.89	241	1.8	7.1	2.3	91
YX3-280M-2	90	163	2975	94.1	0.89	289	1.8	7.1	2.3	91
YX3-315S-2	110	197	2975	94.3	0.90	353	1.8	7.1	2.3	92
YX3-315M-2	132	236	2975	94.6	0.90	424	1.8	7.1	2.3	92
YX3-315L1-2	160	282	2975	94.8	0.91	514	1.8	7.2	2.3	92
YX3-315L-2	185	325	2975	94.9	0.91	594	1.8	7.2	2.3	92
YX3-315L2-2	200	352	2975	95.0	0.91	642	1.8	7.2	2.2	92
YX3-315L3-2	220	387	2975	95.0	0.91	706	1.8	7.2	2.2	92

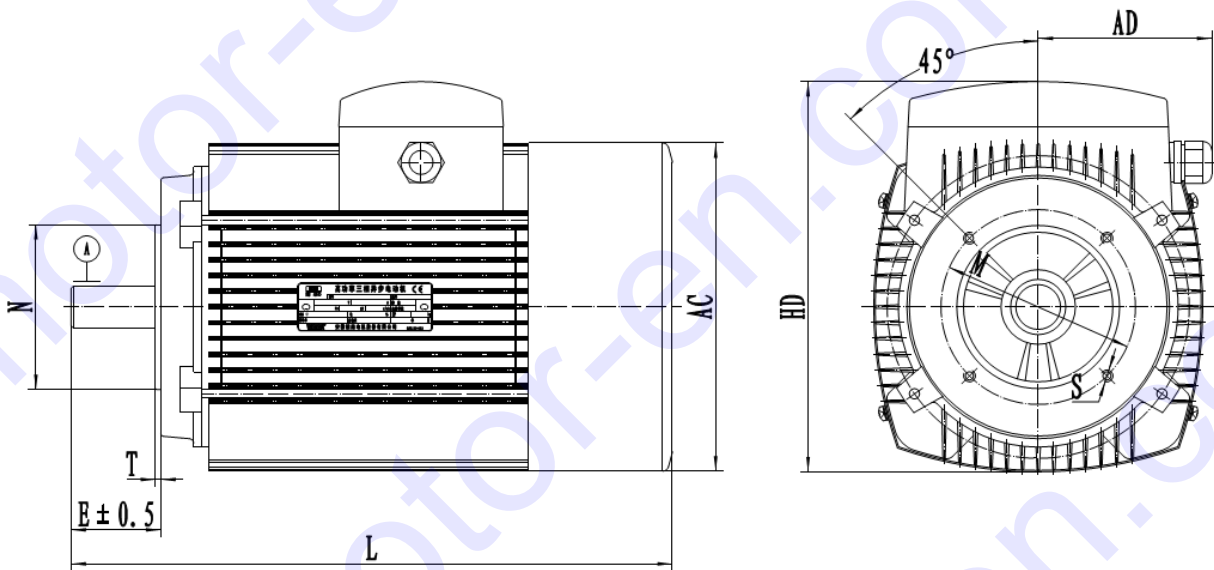
1) Performance data here is for reference, detail data should subject to the data on nameplate

2) Performance data here is based on 380V/50Hz; motors of other voltage can be customized.

Dimensions & Mounting

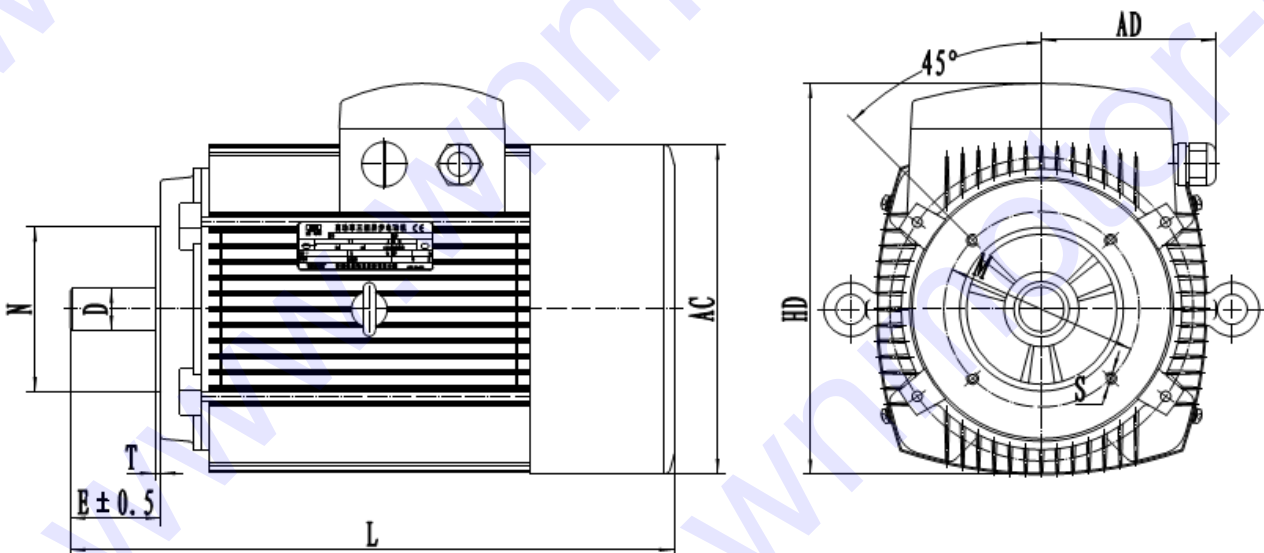
mm

**V18** (Vertical footless mounted)



H71-90

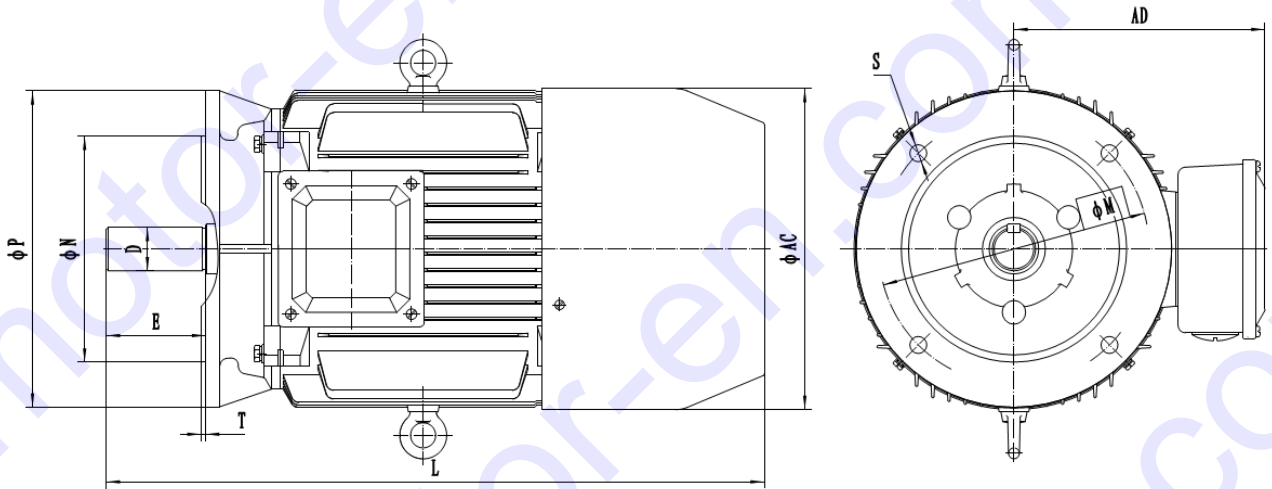
Frame	Pole	Mounting Dimension							Overall Dimension			
		D	E	M	N	P	S	T	AC	AD	HD	L
71	2	14	30	85	70	105	4-M6	2.5	140	95	175	255
80	2	19	40	100	80	120	4-M6	3.0	150	95	185	305
90	2	24	50	115	95	139	4-M8	3.0	175	110	215	370



H100-132

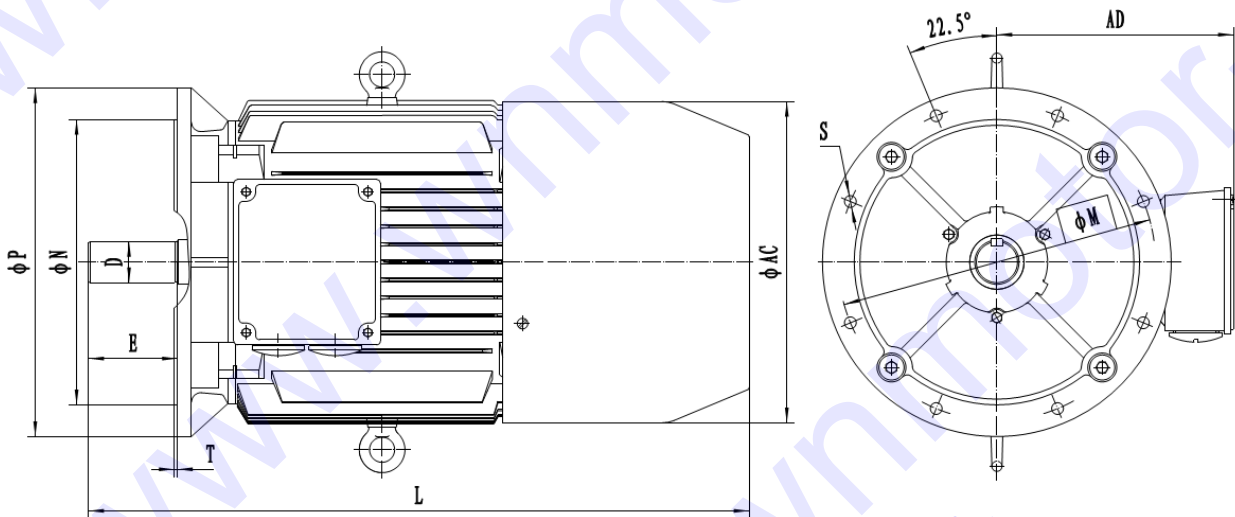
Frame	Pole	Mounting Dimension							Overall Dimension			
		D	E	M	N	P	S	T	AC	AD	HD	L
100	2	28	60	130	110	160	4-M8	3.5	190	110	240	390
112	170											
132	2	38	80	165	130	207	4-M10	3.5	256	125	300	475

V1 (Vertical shaft down footless flange mounted)



H160-225

Frame	Pole	Mounting Dimension							Overall Dimension		
		D	E	M	N	P	S	T	AC	AD	L
160M	2	42	110	300	250	350	4-φ19	5	320	260	615
160L											660
180M	2	48	110	300	250	350	4-φ19	5	360	265	685
180L											725
200L	2	55	110	350	300	400	4-φ19	5	400	305	790
225M	2	55	110	400	350	450	8-φ19	5	450	325	810



H250-315

Frame	Pole	Mounting Dimension							Overall Dimension		
		D	E	M	N	P	S	T	AC	AD	L
250M	2	60	140	500	450	550	8-φ19	5	515	380	890
280S	2	65	140	500	450	550	8-φ19	5	550	395	960
280M											1010
315S	2	65	140	600	550	660	8-φ24	6	630	540	1180
315M											1215
315L											1290

Tips: The motor here is of “Shaft extension without key” structure. “Shaft extension with key” structure should be added to the request or description when order is placed. Data above may be changed without prior notice.