Certificate no.:
TAE0000574

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Electric Motor

with type designation(s)
Y-H series

issued to
Shandong Sunvim Motor Co., Ltd.
Gaomi, Shandong, China

is found to comply with
DNV rules for classification – Ships, offshore units, and high speed and light craft

Application:

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Issued at **Høvik** on **2026-02-26**
This Certificate is valid until **2031-02-25**.
DNV local unit: **Qingdao NB & CMC**

for **DNV**

Approval Engineer: **Andreas Andrecht**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.

Product description

The motors of this series are sealing-in, self-cooling and caged type marine three-phase induction motor.
The motors can be used to drive various machines, including pumps, ventilators, separators, hydraulic machines and other machines.

Voltage	200V~830V
Output Power	4kW~852kW
Frequency	50/60Hz
No. of poles	2,4,6,8 and 12
Duty type	S1 to S6
Insulation Class	F/H
Degree of protection	IP54, IP55, IP56

Type	Rated Voltage 200～830V			Rated Power (kW)	Insulation Class	Duty	Degree of Protection
	Rated Current (A)	50Hz Rated Frequency	60Hz Rated Frequency				
		Rated Speed /r/min)					
Y160M1-2-H	10.8～44.8	2930	3516	11～13.2	F/H	S1～S6	IP54～IP56
Y160M2-2-H	14.4～59.9	2930	3516	15～18	F/H	S1～S6	IP54～IP56
Y160L-2-H	17.8～74	2930	3516	18.5～22.2	F/H	S1～S6	IP54～IP56
Y160M-4-H	11.4～47.3	1460	1752	11～13.2	F/H	S1～S6	IP54～IP56
Y160L-4-H	15.2～63.2	1460	1752	15～18	F/H	S1～S6	IP54～IP56
Y160M-6-H	8.5～35.4	970	1164	7.5～9	F/H	S1～S6	IP54～IP56
Y160L-6-H	12.5～51.8	970	1164	11～13.2	F/H	S1～S6	IP54～IP56
Y160M1-8-H	5.3～21.8	720	864	4～4.8	F/H	S1～S6	IP54～IP56
Y160M2-8-H	6.7～27.8	720	864	5.5～6.6	F/H	S1～S6	IP54～IP56
Y160L-8-H	8.8～36.7	720	864	7.5～9	F/H	S1～S6	IP54～IP56
Y180M-2-H	21.2～87.9	2940	3528	22～26.4	F/H	S1～S6	IP54～IP56
Y180M-4-H	17.9～74.4	1470	1764	18.5～22.2	F/H	S1～S6	IP54～IP56
Y180L-4-H	21.1～87.5	1470	1764	22～26.4	F/H	S1～S6	IP54～IP56
Y180L-6-H	16.5～68.4	970	1164	15～18	F/H	S1～S6	IP54～IP56
Y180L-8-H	12.8～53.1	730	876	11～13.2	F/H	S1～S6	IP54～IP56
Y200L1-2-H	28.9～120	2950	3540	30～36	F/H	S1～S6	IP54～IP56
Y200L2-2-H	36.7～144	2950	3540	37～44.4	F/H	S1～S6	IP54～IP56
Y200L-4-H	28.7～119	1470	1764	30～36	F/H	S1～S6	IP54～IP56
Y200L1-6-H	18.8～77.9	970	1164	18.5～22.2	F/H	S1～S6	IP54～IP56
Y200L2-6-H	22.3～92.7	970	1164	22～26.4	F/H	S1～S6	IP54～IP56

Y200L-8-H	16.6～69	730	876	15～18	F/H	S1～S6	IP54～IP56
Y225M-2-H	42.9～178	2970	3564	45～54	F/H	S1～S6	IP54～IP56
Y225S-4-H	35.2～146	1480	1776	37～44.4	F/H	S1～S6	IP54～IP56
Y225M-4-H	42.4～174	1480	1776	45～54	F/H	S1～S6	IP54～IP56
Y225M-6-H	30.6～127	980	1176	30～36	F/H	S1～S6	IP54～IP56
Y225S-8-H	20.1～83.5	730	876	18.5～22.2	F/H	S1～S6	IP54～IP56
Y225M-8-H	23.7～98.2	740	888	22-26.4	F/H	S1～S6	IP54～IP56
Y250M-2-H	51.3～213	2970	3564	55～66	F/H	S1～S6	IP54～IP56
Y250M-4-H	51.3～213	1480	1776	55～66	F/H	S1～S6	IP54～IP56
Y250M-6-H	35.4～147	980	1176	37～44.4	F/H	S1～S6	IP54～IP56
Y250M-8-H	32.3～134	740	888	30～36	F/H	S1～S6	IP54～IP56
Y280S-2-H	69.4～288	2970	3564	75～90	F/H	S1～S6	IP54～IP56
Y280M-2-H	83.4～346	2970	3564	90～108	F/H	S1～S6	IP54～IP56
Y280S-4-H	69.4～288	1480	1776	75～90	F/H	S1～S6	IP54～IP56
Y280M-4-H	81.9～340	1480	1776	90～108	F/H	S1～S6	IP54～IP56

Type	Rated Voltage 200～830V			Rated Power (kW)	Insulation Class	Rating	Degree of Protection
	Rated Current (A)	50Hz Rated Frequency	60Hz Rated Frequency				
		Rated Speed /r/min)					
Y280S-6-H	43.1～179	980	1176	45～54	F/H	S1～S6	IP54～IP56
Y280M-6-H	53.0～220	980	1176	55～66	F/H	S1～S6	IP54～IP56
Y280S-8-H	39.8～165	740	888	37～44.4	F/H	S1～S6	IP54～IP56
Y280M-8-H	47.2～196	740	888	45～54	F/H	S1～S6	IP54～IP56
Y315S-2-H	101～421	2980	3576	110～132	F/H	S1～S6	IP54～IP56
Y315M-2-H	121～502	2980	3576	132～158.4	F/H	S1～S6	IP54～IP56
Y315L1-2-H	146～605	2980	3576	160～192	F/H	S1～S6	IP54～IP56
Y315L2-2-H	164～682	2980	3576	185～222	F/H	S1～S6	IP54～IP56
Y315L3-2-H	182～757	2980	3576	200～240	F/H	S1～S6	IP54～IP56
Y315S-4-H	100～417	1480	1776	110～132	F/H	S1～S6	IP54～IP56
Y315M-4-H	120～497	1480	1776	132～158.4	F/H	S1～S6	IP54～IP56
Y315L1-4-H	144～599	1480	1776	160～192	F/H	S1～S6	IP54～IP56
Y315L2-4-H	168～696	1480	1776	185～222	F/H	S1～S6	IP54～IP56
Y315L3-4-H	180～748	1490	1788	200～240	F/H	S1～S6	IP54～IP56
Y315S-6-H	70.4～292	990	1188	75～90	F/H	S1～S6	IP54～IP56
Y315M-6-H	84.3～350	990	1188	90～108	F/H	S1～S6	IP54～IP56
Y315L1-6-H	102～425	990	1188	110～132	F/H	S1～S6	IP54～IP56
Y315L2-6-H	123～510	990	1188	132～158.4	F/H	S1～S6	IP54～IP56
Y315S-8-H	56.9～236	740	888	55～66	F/H	S1～S6	IP54～IP56
Y315M-8-H	75.9～315	740	888	75～90	F/H	S1～S6	IP54～IP56
Y315L1-8-H	89.4～371	740	888	90～108	F/H	S1～S6	IP54～IP56
Y315L2-8-H	109～452	740	888	110～132	F/H	S1～S6	IP54～IP56
Y355M1-2-H	195～810	2980	3576	220～264	F/H	S1～S6	IP54～IP56
Y355M2-2-H	225～935	2980	3576	250～300	F/H	S1～S6	IP54～IP56
Y355L1-2-H	248～1030	2980	3576	280～336	F/H	S1～S6	IP54～IP56
Y355L2-2-H	283～1173	2980	3576	315～378	F/H	S1～S6	IP54～IP56
Y355X1-2-H	314～1304	2980	3576	355～426	F/H	S1～S6	IP54～IP56

Y355X2-2-H	353～1467	2980	3576	400～480	F/H	S1～S6	IP54～IP56
Y355X3-2-H	398～1652	2980	3576	450～540	F/H	S1～S6	IP54～IP56
Y355M1-4-H	197～819	1490	1788	220～264	F/H	S1～S6	IP54～IP56
Y355M2-4-H	232～962	1486	1783	250～300	F/H	S1～S6	IP54～IP56
Y355L1-4-H	251～1043	1486	1783	280～336	F/H	S1～S6	IP54～IP56
Y355L2-4-H	291～1206	1486	1783	315～378	F/H	S1～S6	IP54～IP56
Y355X1-4-H	356～1478	1487	1784	400～480	F/H	S1～S6	IP54～IP56
Y355X2-4-H	400～1662	1487	1784	450～540	F/H	S1～S6	IP54～IP56
Y355X3-4-H	445～1847	1487	1784	500～600	F/H	S1～S6	IP54～IP56
Y355M1-6-H	151～626	990	1188	160～192	F/H	S1～S6	IP54～IP56
Y355M2-6-H	170～705	990	1188	185～222	F/H	S1～S6	IP54～IP56
Y355M3-6-H	188～781	990	1188	200～240	F/H	S1～S6	IP54～IP56
Y355L1-6-H	206～856	990	1188	220～264	F/H	S1～S6	IP54～IP56
Y355L2-6-H	234～972	990	1188	250～300	F/H	S1～S6	IP54～IP56
Y355L3-6-H	256～1065	990	1188	280～336	F/H	S1～S6	IP54～IP56
Y355L4-6-H	296～1227	990	1188	315～378	F/H	S1～S6	IP54～IP56
Y355X1-6-H	332～1378	991	1189	355～426	F/H	S1～S6	IP54～IP56
Y355X2-6-H	373～1552	993	1192	400～480	F/H	S1～S6	IP54～IP56

Type	Rated Voltage 200～830V			Rated Power (kW)	Insulation Class	Rating	Degree of Protection
	Rated Current (A)	50Hz Rated Frequency	60Hz Rated Frequency				
		Rated Speed /r/min)					
Y355M1-8-H	132～549	740	888	132～158.4	F/H	S1～S6	IP54～IP56
Y355M2-8-H	160～663	740	888	160～192	F/H	S1～S6	IP54～IP56
Y355L1-8-H	186～771	740	888	185～222	F/H	S1～S6	IP54～IP56
Y355L2-8-H	199～827	743	892	200～240	F/H	S1～S6	IP54～IP56
Y355X1-8-H	228～947	743	892	220～264	F/H	S1～S6	IP54～IP56
Y355X2-8-H	260～1078	743	892	250～300	F/H	S1～S6	IP54～IP56
Y355X3-8-H	290～1206	743	892	280～336	F/H	S1～S6	IP54～IP56
Y355X4-8-H	327～1358	743	892	315～378	F/H	S1～S6	IP54～IP56
Y355M1-12-H	71～425	490	588	75～90	F/H	S1～S6	IP54～IP56
Y355M2-12-H	85～509	490	588	90～108	F/H	S1～S6	IP54～IP56
Y355L1-12-H	104～623	490	588	110～132	F/H	S1～S6	IP54～IP56
Y355L2-12-H	125～747	490	588	132～158	F/H	S1～S6	IP54～IP56
Y355X1-12-H	152～906	490	588	160～192	F/H	S1～S6	IP54～IP56
Y355X2-12-H	176～1047	490	588	185～222	F/H	S1～S6	IP54～IP56
Y400X1-2-H	314～1304	2980	3576	355～426	F/H	S1～S6	IP54～IP56
Y400X2-2-H	353～1467	2980	3576	400～480	F/H	S1～S6	IP54～IP56
Y400X3-2-H	401～1664	2980	3576	450～540	F/H	S1～S6	IP54～IP56
Y400X4-2-H	446～1849	2980	3576	500～600	F/H	S1～S6	IP54～IP56
Y400X5-2-H	499～2071	2980	3576	560～672	F/H	S1～S6	IP54～IP56
Y400X1-4-H	319～1324	1487	1784	355～426	F/H	S1～S6	IP54～IP56
Y400X2-4-H	360～1492	1487	1784	400～480	F/H	S1～S6	IP54～IP56
Y400X3-4-H	449～1865	1487	1784	500～600	F/H	S1～S6	IP54～IP56
Y400X4-4-H	503～2089	1490	1788	560～672	F/H	S1～S6	IP54～IP56
Y400X5-4-H	567～2353	1490	1788	630～756	F/H	S1～S6	IP54～IP56
Y400X1-6-H	294～1221	993	1192	315～378	F/H	S1～S6	IP54～IP56
Y400X2-6-H	329～1376	993	1192	355～426	F/H	S1～S6	IP54～IP56
Y400X3-6-H	373～1550	993	1192	400～480	F/H	S1～S6	IP54～IP56

Y400X4-6-H	420～1743	993	1192	450～540	F/H	S1～S6	IP54～IP56
Y400X5-6-H	467～1938	993	1192	500～600	F/H	S1～S6	IP54～IP56
Y400X6-6-H	523～2170	993	1192	560～672	F/H	S1～S6	IP54～IP56
Y400X1-8-H	263～1090	744	893	250～300	F/H	S1～S6	IP54～IP56
Y400X2-8-H	294～1221	744	893	280～336	F/H	S1～S6	IP54～IP56
Y400X3-8-H	331～1374	744	893	315～378	F/H	S1～S6	IP54～IP56
Y400X4-8-H	373～1548	744	893	355～426	F/H	S1～S6	IP54～IP56
Y400X5-8-H	420～1743	744	893	400～480	F/H	S1～S6	IP54～IP56
Y450X1-4-H	509～2112	1490	1788	560～672	F/H	S1～S6	IP54～IP56
Y450X2-4-H	572～2375	1490	1788	630～756	F/H	S1～S6	IP54～IP56
Y450X3-4-H	645～2678	1490	1788	710～852	F/H	S1～S6	IP54～IP56
Y450X1-6-H	461～1913	993	1192	500～600	F/H	S1～S6	IP54～IP56
Y450X2-6-H	516～2143	993	1192	560～672	F/H	S1～S6	IP54～IP56
Y450X3-6-H	581～2411	993	1192	630～756	F/H	S1～S6	IP54～IP56
Y450X4-6-H	655～2717	993	1192	710～852	F/H	S1～S6	IP54～IP56
Y450X1-8-H	314～1304	744	893	315～378	F/H	S1～S6	IP54～IP56
Y450X2-8-H	354～1470	744	893	355～426	F/H	S1～S6	IP54～IP56
Y450X3-8-H	399～1656	744	893	400～480	F/H	S1～S6	IP54～IP56
Y450X4-8-H	449～1863	744	893	450～540	F/H	S1～S6	IP54～IP56
Y450X5-8-H	499～2069	744	893	500～600	F/H	S1～S6	IP54～IP56
Y450X6-8-H	558～2317	744	893	560～672	F/H	S1～S6	IP54～IP56
Y450X7-8-H	628～2607	744	893	630～756	F/H	S1～S6	IP54～IP56

Application/Limitation

This Type Approval Certificate does not replace the requirement to DNV Product Certificate.
A Product Certificate is required for motors ≥300kW.

Type Approval documentation

Tests carried out

According to DNV Class Programme DNV-CP-0393 “Rotating electrical machines”, Edition Jan. 2022
IEC 60034-1:2022, IEC 60092-301:2025

Marking of product

According to IEC 60034-1, clause 10.2

Manufactured by

Shandong Sunvim Motor Co., Ltd.
Gaomi, Shandong,China

Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the Type approval are complied with and that no alterations are made to the product design or choice of materials.

The main elements of the assessment are:

- Inspection on factory samples, selected at random from the production line (where practicable)
- Results from Routine Tests (RT) checked (if not available tests according to RT to be carried out)
- Review of type approval documentation
- Review of possible change in design, materials and performance
- Ensuring traceability between manufacturer’s product type marking and Type Approval Certificate.

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

End of certificate