

To customers and whom it may concern,

April 3, 2023

Sumitomo Drive Technologies

Sumitomo Heavy Industries, Ltd.

PTC Division

Incorrect description of the protection method class for motor frame sizes F50/56 by Sumitomo Heavy Industries, Ltd.

Thank you for your continuous patronage.

It has come to light that there was an error in the description of the protection method class in the catalog, nameplate, and test report for our motor frame sizes F50/56.

We would like to express our sincerest apologies for the inconvenience this has caused for our customers and relevant parties.

1. Incorrect description

For the catalog, nameplate, and test report for the subject products mentioned in Section 2 below, the protection method class was listed as IP44, whereas the protection method class for the actual products is IP20.

Table 1. Incorrect description of the protection method class

	Description in the catalog, nameplate, and test report	Protection method of the actual product
Protection method class	IP44	IP20

Table 2. Catalog description example

Type	Item	Standard specifications
Three phase motor	Capacity range Note 1)	15W to 0.55kW 4P
	Protection method	Indoor type (IP44 Totally enclosed splash-proof type/indoors) or Outdoor type (0.1 to 0.55Kw only, IP44 totally enclosed splash-proof type/outdoors)
	Enclosure	Totally enclosed fan cooled type (15W to 0.1kW is a totally enclosed naturally air-cooling type)
	Power source	Power sources of 3 ratings 200V/50/60Hz, 220V/60Hz or 400V 50/60Hz, 440V 60Hz (15W, 25W, 40W, 60W, 90W are 200V 50/60Hz, 220V 60Hz)
	Thermal class	15W to 0.4kW 120 (E) 0.55kW 130(B)
	Time rating	S1 (continuous rating)
	Start method	Direct input
	Lead wire	3 (lug type)
	Standard	JIS C 4034-1

Figure 1. Nameplate description example

HYPONIC DRIVE ®		
MODEL	S.F.	
RATIO	OUTPUT RATING	N·m
P Ø TYPE		
VOLTS	FRAME	
Hz	M/B THERMAL	
M.AMP	RATING	
r/min	B.TORQUE	N·m
B.AMP	JISC4034-1	IP44
SERIAL No.		
Sumitomo Heavy Industries, Ltd.		

2. Subject product

Table 3. Subject products

Model	Gear reducer frame size	Motor capacity range	Motor frame size	Terminal box
HYPONIC	-	15 to 90W	F50/56	Indoor no terminal box
PREST NEO	1160#	40 to 90W	F56	
ALTAX NEO	5067#	40 to 100W	F56	

There is a gap between the lead wire and rubber bushing at the lead wire cable port, so the protection method class is IP20.

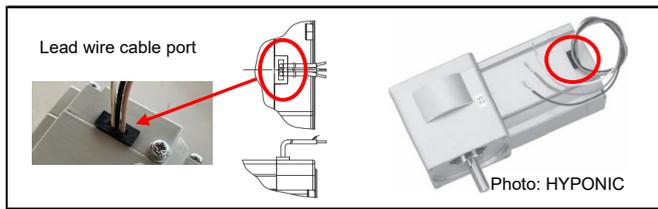


Figure 2. Lead wire cable port for HYPONIC/PREST NEO

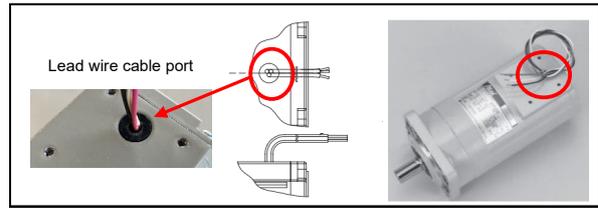


Figure 3. Lead wire cable port for ALTAX NEO

3. Protection method class IP20

In the “surrounding conditions” in the catalog, the “Installation Location” is to be “Indoors (area with minimal dust, no contact with water).” Due to this, if you are using the product under such conditions, the use of the current protection method class IP20 poses no issue.

Table 4. Surrounding conditions in the catalog

Item		Standard specifications
Surrounding conditions	Installation location	Indoor type: Indoors (area with minimal dust, no contact with water) Outdoor type: Indoors or outdoors (area with little contact with rain water) Vibration: Maximum 1G
	Ambient temperature	-10 to +40°C (There shall be no freezing)
	Ambient humidity	Maximum 85%. However, there shall be no condensation.
	Altitude	Maximum 1,000 m
	Atmosphere	No corrosive or volatile gases, no steam. Dust-free, well-ventilated area.

*Please see the supplement 1 for protection method classes.

4. Accommodation for products that have been ordered/have not been shipped and future orders

Please check if it is possible for the product to be used as motor protection method class IP20.

1) If it can be used as motor protection method class IP20

The conventional type, in which the motor lead wire directly comes out of the frame (no terminal box), shall be shipped and delivered as “protection method class IP20” on the nameplate. (Standard specifications)

2) If you wish to specify motor protection method class IP44

A resin terminal box shall be assembled for products that have been ordered/have not been shipped as “protection method class IP44” on the nameplate free of charge. This accommodation shall be optional for future orders.

Table 5. Product specifications of motor frame sizes F50/56

Indoors specifications	Product specifications	
	Terminal box	Protection method class
Standard	No terminal box	IP20
Optional	Resin terminal box	IP44

*Please see the supplement 2 for the external view, terminal box location, and leading wire direction. We shall also proceed with replacing/revising the descriptions in the catalog.

5. Accommodation for already shipped products

If the said product is installed on your site “Indoors (area with minimal dust, no contact with water)” as described in the catalog and if there is no problem with the use, please continue using the product as is.

For the customers in Japan, if you wish for the nameplate to be reissued on an already shipped product, please contact the closest sales office of Sumitomo Heavy Industries Power Transmission Controls Sales Co., Ltd. and inform us of the serial number indicated in the “SERIAL No.” column of the product nameplate. We will reissue the product nameplate.

For the customers in overseas, please access to the inquiry form and send us the information.

*For the customers in Japan

Please visit below website to find the closest sales offices of Sumitomo Heavy Industries Power Transmission Controls Sales Co., Ltd.

<https://cyclo.shi.co.jp/operation/oper010.html>

*For the customers in overseas

Please fill in the form and send us the information.

<https://japan.sumitomodrive.com/en-jp/contact-us>

Please contact the sales office mentioned above or send us the information via inquiry form if you additionally require the motor protection method class IP44 so that we can discuss the accommodation.

We apologize in advance for any inconvenience, but please note that the applicable subject products above shall be limited to those which have been shipped by Sumitomo Heavy Industries Sumitomo Heavy Industries Power Transmission Controls Sales Co., Ltd. less than 15 years ago (shipped in January of 2008 or later).

(Specified based on the recommended update timing for induction electric motors according to the Japan Electrical Manufacturers' Association (JEMA).)

Again, we would like to express our sincerest apologies for the inconvenience this has caused for our customers and relevant parties.

We shall not only strive to take thorough preventive measures to avoid similar issues in the future but also promote efforts to improve the quality of our products.

End of document

Supplement 1: Protection method classes

First symbol - Protection type for human body and solid foreign materials }
 Second symbol - Protection type for water ingress. } classified according to combination (JIS C 4034)

Protection type of the electric machine and our support

First symbol First type name	Second symbol Second type name	0 Non-protected type	2 Drip proof type	3 Spray-proof type	4 Splash proof type	5 Water-jet-proof type	6 Sea-wave-proof type	7 Immersion-proof type	8 Submersible type
0 (Non-protected type)		IP00			x	x	x	x	
1 (Semi-protected type)		IP10	IP12S			x	x	x	
2 (Protected type)		IP20	IP22S	IP23S	IP24	x	x	x	
4 (Totally enclosed)		x			IP44	IP45			
5 (Dust-proof type)		x			IP54	IP55	IP56		
6 (Complete dust-proof type)		x				IP65		IP67	

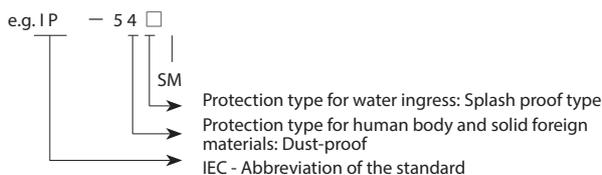
- Note) 1. x indicates what is difficult to combine.
 2. indicates the standard manufacturing range of Sumitomo.
 3. In the case of direct exposure to strong wind and rain and frequent exposure to water, it may be necessary to consider the protection method, so please consult us.
 4. The protection type of the standard motor is IP44 for both indoor and outdoor, but the structures of the indoor and outdoor types are different, so specify the outdoor type in the case of outdoor installation.

Grade of the first symbol

Nomenclature	Symbol	Description
Non-protected type	0	Structure without special protection against contact with human body and intrusion of solid foreign materials.
Semi-protected type	1	Structure to prevent large parts of human body such as hand from touching the rotation part or conductive part of the machine by mistake. Structure to prevent intrusion of solid foreign materials whose diameters exceeds 50mm.
Protected type	2	Structure to prevent fingers, etc. from touching the rotation part or conductive part of the machine. Structure to prevent intrusion of solid foreign materials over 12mm.
Totally enclosed	4	Structure to prevent objects whose minimum width or minimum depth is larger than 1mm such as tools and electric cables from touching the rotation part or conductive part of the machine. Structure to prevent intrusion of solid foreign materials over 1mm. However, the structures of drainage wells and inlets and outlets of the external fan can be that of symbol 2.
Dust-proof type	5	Structure to prevent any objects from touching the rotation part or conductive part of the machine. Structure to prevent intrusion of dust as much as possible and prevent it from hindering the normal operation even in the event of intrusion.
Complete dust-proof type	6	Structure to prevent dust from intruding inside.

Grade of the second symbol

Nomenclature	Symbol	Description
Non-protected type	0	Structure without special protection against water ingress.
Drip-proof type	2	Structure to prevent harmful effect of water droplets dropping at an angle from vertical to 15°.
Spray-proof type	3	Structure to prevent harmful effect of water droplets dropping at an angle from vertical to 60°.
Splash proof type	4	Structure to prevent harmful influence of water droplets in any directions.
Water-jet-proof type	5	Structure to prevent harmful influence of jet in any directions.
Sea-wave-proof type	6	Structure to prevent harmful influence of strong jet in any directions.
Immersion-proof type	7	Structure to prevent harmful effect even in the event of submersion in water at the specified water depth for the specified time and water ingress.
Submersible type	8	Structure to enable normal operation in water.

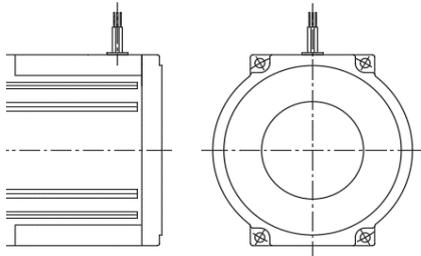
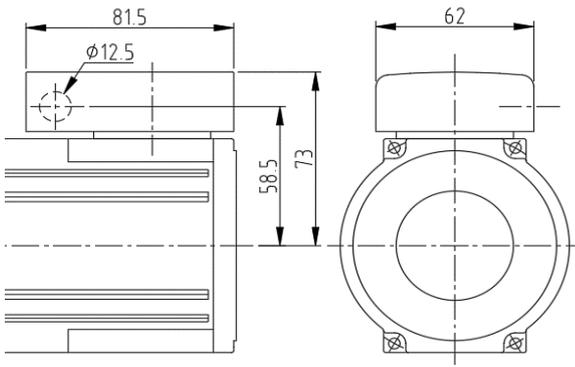


S - Case that the protection type for water ingress is tested while the motor is stopped.
 M - Case that the protection type for water ingress is tested while the motor is in operation.
 Without S or M indication - Conduct the test while the motor is stopped and in operation.

Supplement 2: External view, Terminal box location, Leading wire direction

If you need an outline drawing of models, please contact the the closest sales offices of Sumitomo Heavy Industries Power Transmission Controls Sales Co., Ltd. or send us the information via inquiry form mentioned in above Section 5.

Model	Gear Motor Frame Size	Type of terminal box	Protection class I	Terminal box mounting position	Leading wire direction	Availability	External view
HYPONIC 40~90W	15L/R 17 17L/R 1240 1240L/R 1160	Without terminal box	IP20	Left(N33)	-	○	
				Right(N34)	-	○	
				Top(N35)	-	◎(Standard)	
				Bottom(N36)	-	○	
PREST NEO 40~90W	15L/R 17 17L/R 1240 1240L/R 1160	Resin Terminal Box Cover (N2R)	IP44	Left(N33)	A(N3A)	○	
					B(N3B)	N/A	
					C(N3C)	N/A	
					D(N3D)	○	
				Right(N34)	A(N3A)	○	
					B(N3B)	N/A	
					C(N3C)	N/A	
					D(N3D)	○	
				Top(N35)	A(N3A)	◎(Standard)	
					B(N3B)	N/A	
					C(N3C)	N/A	
					D(N3D)	○	
				Bottom(N36)	A(N3A)	○	
					B(N3B)	N/A	
					C(N3C)	N/A	
					D(N3D)	○	
HYPONIC 15~60W	01L/R 03 03L/R 05L/R 07 07L/R	Without terminal box	IP20	Left(N33)	-	○	
				Right(N34)	-	○	
				Top(N35)	-	◎(Standard)	
				Bottom(N36)	-	○	
	01L/R 03 03L/R 05L/R 07 07L/R	Resin Terminal Box Cover (N2R)	IP44	Left(N33)	A(N3A)	○	
					B(N3B)	N/A	
					C(N3C)	N/A	
					D(N3D)	○	
Right(N34)	A(N3A)	○					
	B(N3B)	N/A					
	C(N3C)	N/A					
	D(N3D)	○					
Top(N35)	A(N3A)	◎(Standard)					
	B(N3B)	N/A					
	C(N3C)	N/A					
	D(N3D)	○					
Bottom(N36)	A(N3A)	○					
	B(N3B)	N/A					
	C(N3C)	N/A					
	D(N3D)	○					

Model	Gear Motor Frame Size	Type of terminal box	Protection class I	Terminal box mounting position	Leading wire direction	Availability	External view
ALTAG NEO 40~100W	5067	Without terminal box	IP20	Left(N33)	-	○	
				Right(N34)	-	○	
				Top(N35)	-	◎(Standard)	
				Bottom(N36)	-	○	
	5067	Resin Terminal Box Cover (N2R)	IP44	Left(N33)	A(N3A)	○	
					B(N3B)	○	
					C(N3C)	○	
					D(N3D)	○	
				Right(N34)	A(N3A)	○	
					B(N3B)	○	
					C(N3C)	○	
					D(N3D)	○	
				Top(N35)	A(N3A)	◎(Standard)	
					B(N3B)	○	
					C(N3C)	○	
					D(N3D)	○	
Bottom(N36)	A(N3A)	○					
	B(N3B)	○					
	C(N3C)	○					
	D(N3D)	○					