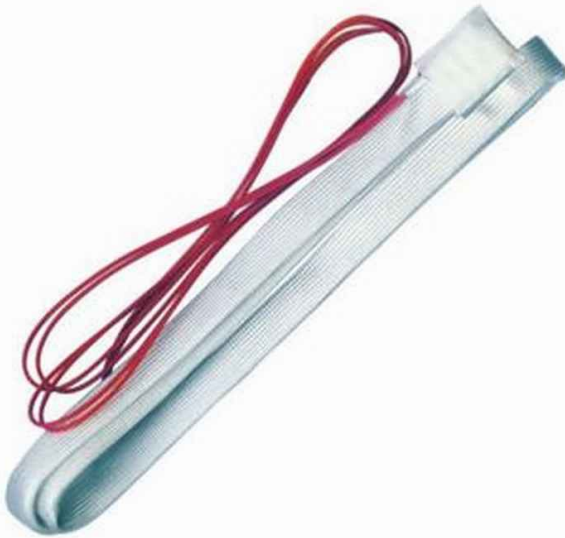


Moisture-resistant Heating Tape for Small/Medium Low-voltage Motor

ZL 2005 2 0091329.X UL File No.:E326107 CE File No:TCCE01087



I. Overview

In moist environment, after motor stops working, its internal elements are vulnerable to moisture, impairing the insulation of the motor. Motor moisture-resistant heating tape is designed for moisture resistance. It keeps the temperature of the motor winding always 5°C higher than that of the ambient environment, so as to prevent the motor coil winding from moisture condensation and ensure the normal working of the motor even in moist environment.

II. Features

The moisture-resistant heating tape is connected to the normally-closed contact of the AC contactor of the motor. In any environment, as long as the motor is powered off, the moisture-resistant heating tape starts working to keep the temperature of the motor winding always 5°C higher than that of the ambient environment. As long as the motor is powered on, the heating tape is automatically powered off. The heating tape models are selected according to the motor seat No. There are a complete range of moisture-resistance heating tapes for low-voltage motors as well as customized ones available for special needs. They enjoy reliable quality, advanced technology, stable structure and easy use methods and can replace the like products imported from foreign countries.

III. Technical Parameters

- 3.1 Voltage-withstanding
- 3.2 Insulating material is temperature-resistant.
- 3.3 Power of heating tape is related with working voltage and current but unrelated with frequency.
- 3.4 Heating tape structure diagram

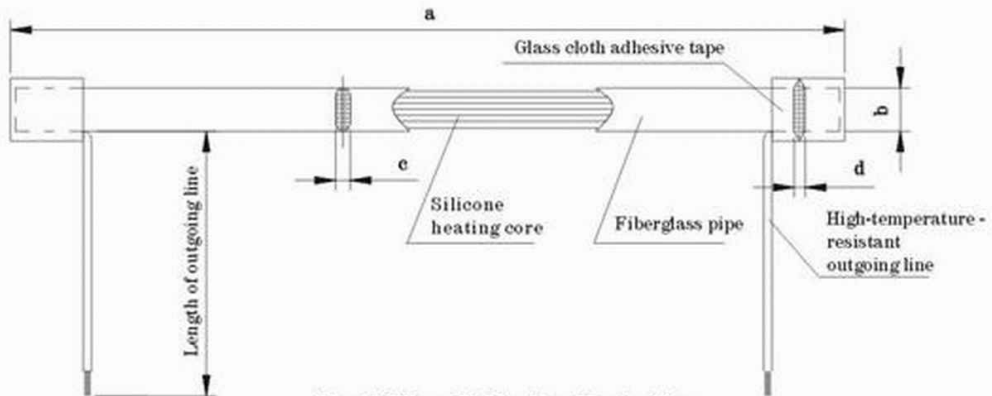


Chart 1 Silicone Rubber Core Heating Tape



3.4 Heating tape specifications

3.4.1 The specification standards of the moisture-resistant heating tapes for BQ motors (motors exported to foreign countries) are specified in the table below:

Model	Length×Width×Thickness	Length of Outgoing Line(mm)	Power(W)	Rated Voltage(V)AC		Rating of Motor
				A	B	
BQ301A(B)	240×12×2.5×4.5	200	10	230	115	H71
BQ302A(B)	300×14×2.5×4.5	380	20	230	115	H80~H90
BQ303A(B)	400×14×2.5×4.5	480	30	230	115	H100~H112
BQ304A(B)	550×14×2.5×4.5	780	40	230	115	H132~H160
BQ305A(B)	680×14×2.5×4.5	900	50	230	115	H180~H200
BQ306A(B)	900×14×2.5×4.5	950	60	230	115	H225~H280
BQ308A(B)	1050×14×2.5×4.5	1050	80	230	115	H315
BQ311A(B)	1350×14×2.5×4.5	1150	110	230	115	H355

Note: for the motors rating of H315 at least, a motor moisture-resistant heating tape must be mounted in front of and at back of the motor winding respectively.

3.4.2 The specification standards of the moisture-resistant heating tapes for KBQ motors (motors used in China) are specified in the table below:

Model	Length×Width×Thickness	Length of Outgoing Line(mm)	Power(W)	Rated Voltage(V)AC		Rating of Motor
				A	B	
KBQ301A(B)	220×12×2.5×4.5	160	10	220	110	H71
KBQ302A(B)	260×14×2.5×4.5	340	20	220	110	H80~H90
KBQ303A(B)	350×14×2.5×4.5	440	30	220	110	H100~H112
KBQ304A(B)	460×14×2.5×4.5	740	40	220	110	H132~H160
KBQ305A(B)	630×14×2.5×4.5	850	50	220	110	H180~H200
KBQ306A(B)	800×14×2.5×4.5	900	60	220	110	H225~H280
KBQ308A(B)	950×14×2.5×4.5	1000	80	220	110	H315
KBQ310A(B)	1350×14×2.5×4.5	1150	100	220	110	H355
KBQ311A(B)	2000×14×2.5×4.5	1500	110	220	110	H400

Note: for the motors rating of H315 at least, 2 motor moisture-resistant heating tapes must be used.



3.4.3 Moisture-resistance heating tapes recommended by Keliang

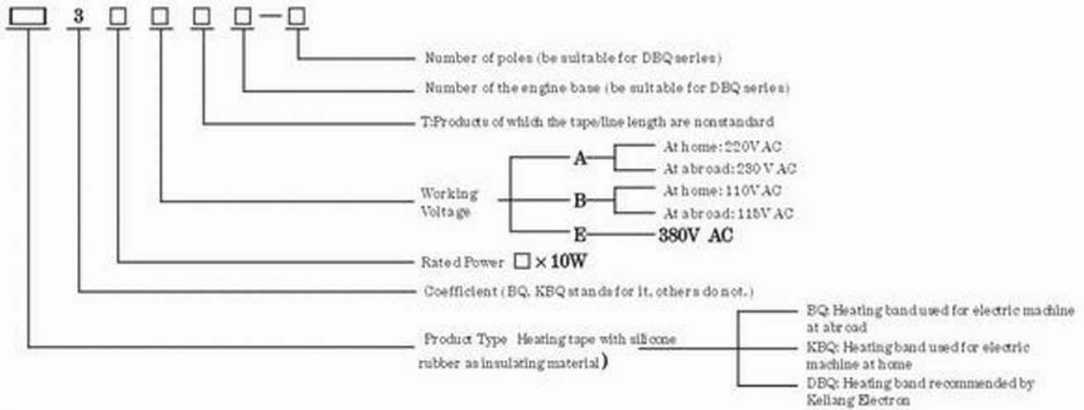
Model	Rated Power of heating tape (W)	Length×Width×Thickness				Length of Outgoing Line(mm)	Rated Voltage(V)AC		Rating of Motor
		Grade 2	Grade 4	Grade 6	Grade 8		A	B	
DBQ02A(B)	20	290	310	343	343	380	220	110	H80
		310	310	350	371				H90
DBQ03A(B)	30	350	420	420	420	480			H100
		420	450	450	450				H112
DBQ04A(B)	40	500	500	560	560	780			H132
		600	600	700	700				H160
DBQ05A(B)	50	785	817	848	848	900			H180
		942	942	974	974				H200
DBQ06A(B)	60	1068	1068	1131	1131	950			H225
		1146	1146	1146	1146				H250
		1256	1288	1320	1320				H280
DBQ08A(B)	80	1508	1508	1540	1540	1050	H315		
DBQ11A(B)	110	1696	1727	1727	1727	1150	H355		

3.4.4 Specification Standard of the moisture-proof heating tape of the Foreign Electric Machine

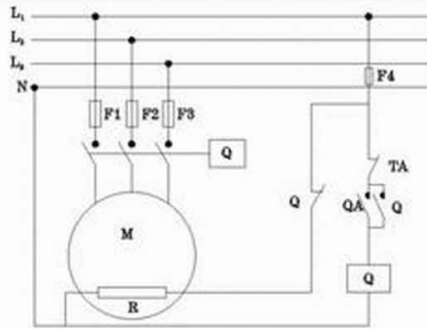
Model	Length×Width×Thickness	Length of Outgoing Line(mm)	Power(W)	Rated Voltage(V)AC		Rating of Motor
				A	B	
KBQ3026A(B)	432×14×2.5×4.5	340	26	230	115	H80~H132
KBQ3065A(B)	1473×14×2.5×4.5	850	65	230	115	H160~H200
KBQ3099A(B)	1702×14×2.5×4.5	900	99	230	115	H225~H280
KBQ3099A(B)	1702×14×2.5×4.5	900	99	230	115	H315~H355

Note: the data above is for reference only. Customized heating tapes for special needs are also available by Keliang. For the motors rating of H315 at least, 2 motor moisture-resistant heating tapes must be used.

IV. Specifications and Models



V. How to Order



M: Electric Machine
R: Heating Tape
Q: Electromagnetism Switch
TA: Switch off Button
QA: Switch on Button

VI. Direction for Use

Safety Information

● Mounting

- ⚠ **注意** ※ Mount the heating tape on the outer layer of the windings at both ends of the motor stator or on the nonflammable material such as metal for fear that fire might occur.
- ※ Do not put any flammable material around for fear that fire might occur.
- ※ Do not use sharp tools, edge tools or blade tools to mount heating tapes for fear that the tapes might be damaged.

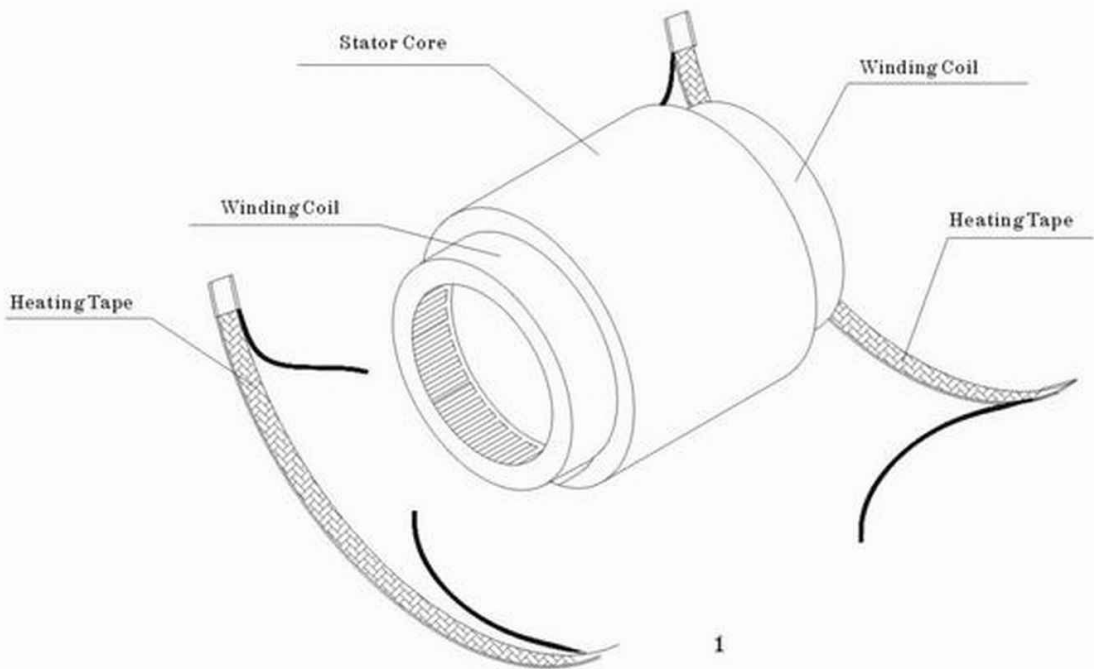
● Connection

- ⚠ **危险** ※ Make sure the input power is off and then connect the heating tape for fear of electric shock or fire.
- ※ Make sure the connection is done by full-time electricians for fear of electric shock or fear.
- ※ Mount the heating tape and then connect it, otherwise electric shock or fire might occur.

- ⚠ **注意** Make sure the rated voltage of the product is consistent with AC supply voltage for fear that the product might be damaged or fire might occur.
- Do not extremely hard pull the outgoing line of the product for fear that the outgoing line might be pulled apart.

1. Mounting

- ※ Make sure the specification and model of the product meets the matching requirements of the motor
- ※ Tidy and clean the stator and winding of the motor
- ※ Mount a single motor moisture-resistant heating tape on the end of the drive winding of the motor
- ※ As for double motor moisture-resistant heating tapes, mount one on the drive end and the other on the non-drive end
- ※ Twine the heating tape around the stator in a non-overlapping way; tie it up with polyester tape, fix the outgoing line in the connection box, impregnate the tape and the motor winding with lacquer, and finally dry them (as shown in Figure 1 and Figure 2).



2. Connection

Refer to the "Reference Diagram for Connection" in Article 5 for particular connection

Pull the outgoing line of the heating tape into the connection box of the motor

Connect the outgoing line to the specified terminal and press it firmly

3. Failures and Solutions

Failures	Reasons	Solutions
Heating tape does not work	1. Power is not on	1. Make power on 2. Securely connect outgoing line to terminal 3. Replace heating tape
Heating tape does not work sometimes	2. Outgoing line is not well connected to terminal	4. Securely connect outgoing line to terminal

