

KS MOTOR WITH BRAKE

shorter.

KS motor is our trade name for a variable speed motor. Here we introduce a KS motor with a brake, newly developed to give service where there is a requirement for frequent stops, starts, and quick speed acceleration.

1. Features

- 1) Braking is accomplished readily as this KS motor (variable speed motor) is provided with a smooth easily operated brake.
- 2) The flywheel effect (GD²) of the drive shaft is very small, as it is so made that the KS drum is inside of the fixed pole and coil.
- 3) Because of the excellent torque characteristic, only a short time is required to stop or start. Thus excellent control is provided where quick speed follow-up is required.
- 4) For a tachometer, a high-frequency generator using a permanent magnet is adopted, so it is free from voltage fluctuation.
- 5) Our ordinary KS motor is 4-pole but in this series we also manufacture 2-pole motors on your request. (Maximum speed of driving shaft: 3000/2400 rpm, 50/60 c/s)

Motor can be manufactured and provided as follows:

Number of poles	Output of driving induction motor
4	Up to 15 kw
2	Up to 7.5 kw

As an example, we quote below the specifications of 7.6 kw driving induction motor for a winding machine. (Model K 20/7+KSB 20/7+SORK 582-2)

2. Specifications

Induction motor (SORK 582–2)

Output: 7.5 kw Frequency: 50 c/s Voltage: 200 v Speed: 2885 rpm

Current: 27 amp

Tachometer (FMI 25/2.4-16)

Output : $\begin{array}{ccc} 5 \text{ va} \\ \text{Output voltage}: & 70 \text{ v} \\ \text{Output current}: & 0.07 \end{array} \right\} \quad \text{at } 1200 \text{ rpm}$

KS clutch and KS brake (KS 20/7+KSB 20/7)

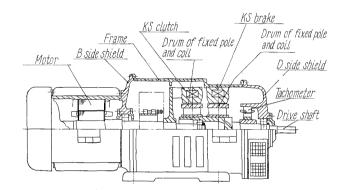
Torque: 1.78 kg-m

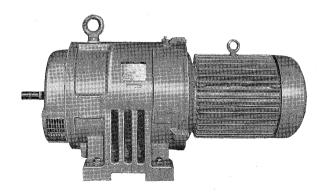
Exciting voltage: dc 110 v

Speed control range: 800~2400 rpm

Starting time: 1~2 sec. Braking time: 1~2 sec.

The abovementioned motor is especially manufactured with a very short starting and braking time to meet the special requirements of a winding machine. Its starting time is $\frac{1}{3}$ that of an ordinary KS motor, and with the built-in brake its braking time is far





(By K. Takahashi, Mie Factory)