Forced Cooling Motors



AC electric motors operating in non standard conditions (low frequency inverter duty, long overcharge periods, heavy duty cycles) could need additional cooling servo-fan. BASV series motors with forced cooling are provided with two additional cooling servo-fans fixed on the motor frame. This cooling system is an MGM patent.

SV series motors have the following features:

- 1. The standard self cooling fan inside the motor is kept additionally to the two cooling servo-fans.
- 2. The whole heating surface is increased as the fan fixing system is itself a heat dissipation element additionally to the existing fins on the frame.
- 3. Low noise level.
- 4. No additional motor length compared to the standard one.
- 5. Manual brake release with manual rotation.
- 6. Uniform winding cooling along the whole motor length.
- 7. The brake friction surface is cooled on the motor side.

Where the forced cooling is used to limit the operating temperature in heavy start/stop duty application, it should be noted that the efficiency of the forced cooling increases with the number of pole of the motor. It's hard to estimate the amount of hot air removed by the forced cooling fans but it can be roughly said that it is the same as the air removed by the standard servo-fan of a 4 pole motor operating at 50 Hz.

It is advisable to use thermal protectors in heavy operating conditions. The table below shows technical details of fans supplied at 230V single-phase. The servo-fans can be supplied both at 50Hz or 60Hz. On request forced cooling fans can be provided with different voltage supply.

BMAV series motors with forced cooling are provided with single axial servo-fan replacing the standard motor self cooling fan.

Motor Type	Dim X	Dim Y	Dim L	Volt	Amp	m³/h	dB (A)
BASV 71	210	107	102	230	2x0.1	93	37
BASV 80	230	108	120	230	2x0.1	93	37
BASV 90	270	129	129	230	2x0.12	300	39
BASV 100	280	129	134	230	2x0.12	300	39
BASV 112	300	142	142	230	2x0.12	300	39
BASV 132	348	169	169	230	2x0.12	615	59
BASV 160	431	184	190	230	2x0.30	615	59
BASV 180	485	211	211	230	2x0.30	615	59
BASV 200	485	211	211	230	2x0.30	615	59
BASV 225	522	221	221	230	2x0.30	615	59

BASV Series

