

8.5 FLANGE ADAPTER

VACON® 100 X is an IP66/Type 4X outdoor drive, designed to be installed as close as possible to the motor, minimizing the use of electrical rooms, integrating the drive as part of the machine, without the use of cabinets.

VACON® 100 X drives are products that can be mounted directly onto the motor, machine or wherever the most efficient location for the drive is. This solution allows the machine designer, to use the available space in and around the machine, optimally. A decentralized solution provides a more flexible solution as an OEM manufacturer can deliver its machine in one piece, and there is no need to install the drives in a separate location. See the MM4 flange adapter in Figure 81.

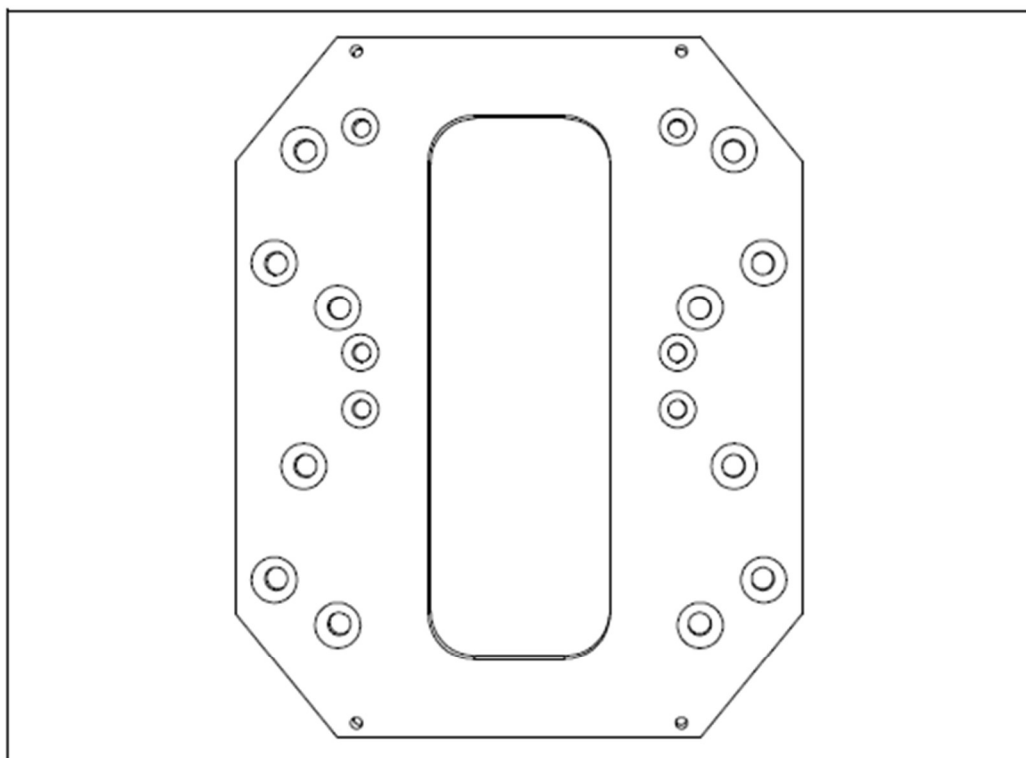


Figure 81. Flange adapter for MM4

These flange adapters can be used, for example, with the following motor types:

- B3 – Foot mounting
- B34 – Foot – B14 face mounting
- B35 – Foot – B5 flange mounting

Compared to a traditional solution, with the AC drives located in an electrical room, a decentralized solution offers significant savings potential in cabling and installation costs. By locating the drive near the machine or onto the motor, the length of the motor cable will be minimized.

ENC-QMMF-MM04 flange adapter can be used with 5 different motor sizes while both ENC-QMMF-MM05 and ENC-QMMF-MM06 flange adapters can be connected only to 3 different motor sizes. See Table 46 for further details.

Table 46 shows the corresponding flange adapters for different motor sizes. See also the relations with the inverter enclosure sizes.

Table 46. Correspondences between flange adapters, motors and inverter sizes.

Flange adapter type code	Motor size	Power at 1500 rpm [kW]	Rated current at 1500 rpm [A]	A [mm]	B [mm]	Inverter enclosure size
ENC-QMMF-MM04	90S	1.1	2.89	140	100	MM4
	90L	1.5	3.67	140	125	
	100L	2.2/3	5.16/6.8	160	140	
	112M	4	8.8	190	140	
	132S	5.5	11.8	216	140	
ENC-QMMF-MM05	132M	7.5	15.6	216	178	MM5
	160M	11	22.6	254	210	
	160L	15	30.1	254	254	
ENC-QMMF-MM06	180M	18.5	36.1	279	241	MM6
	180L	22	42.5	279	279	
	200L	30	57.4	318	305	

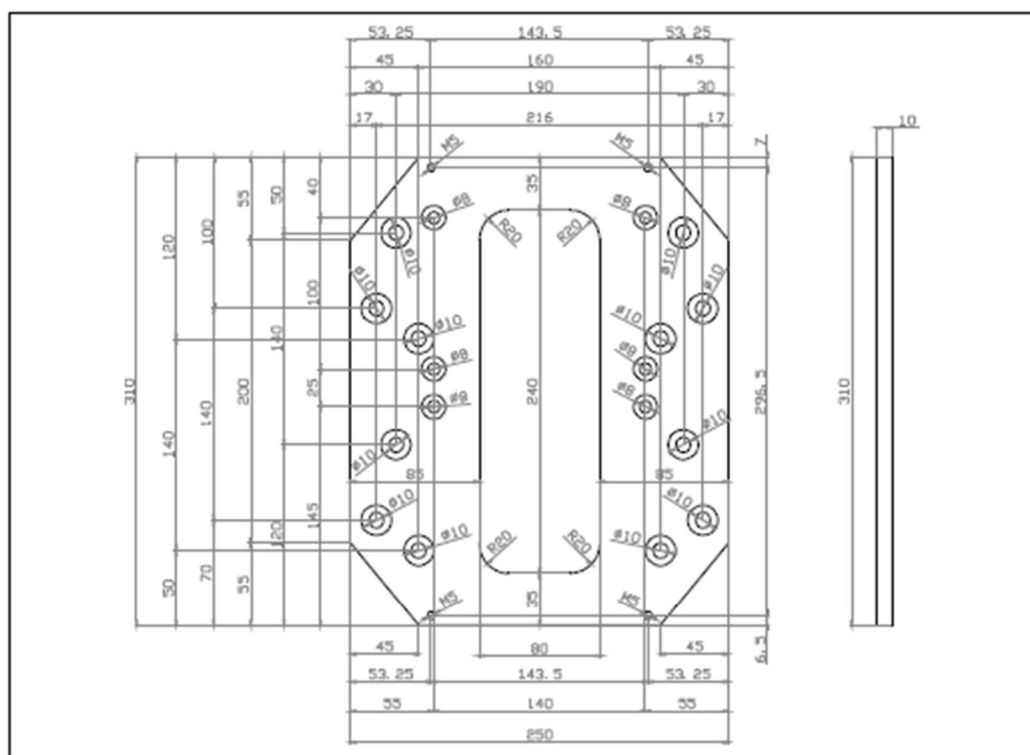


Figure 82. MM4 flange adapter dimensions

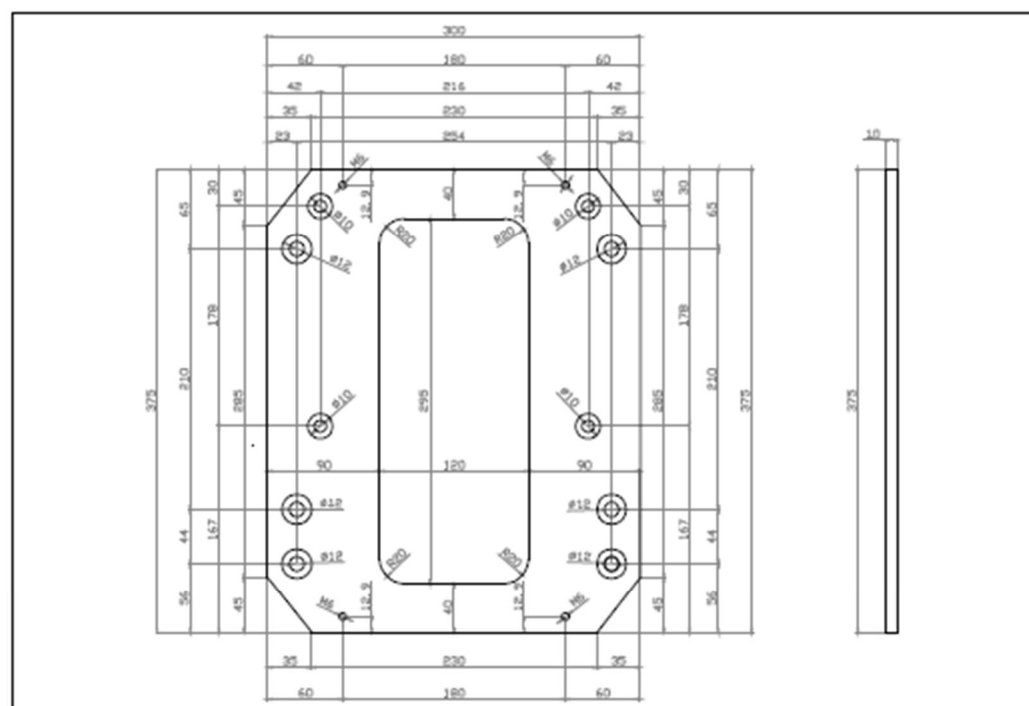


Figure 83. MM5 flange adapter dimensions

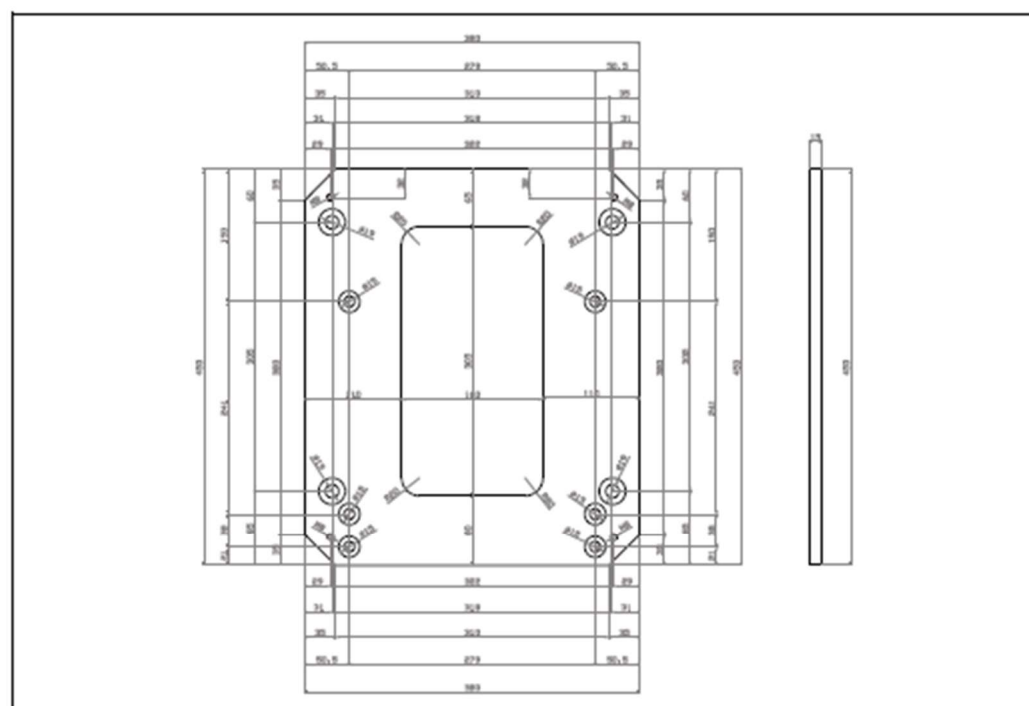


Figure 84. MM6 flange adapter dimensions

8.5.1 MOUNTING INSTRUCTIONS: MM4 EXAMPLE

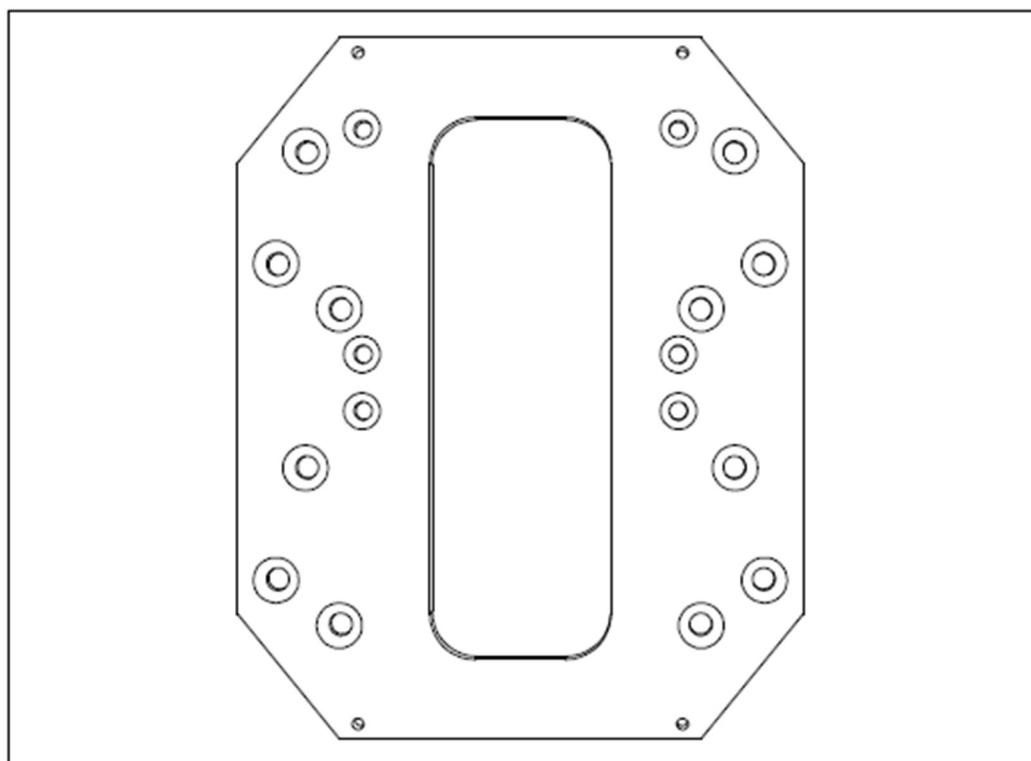


Figure 85. Flange adapter for MM4

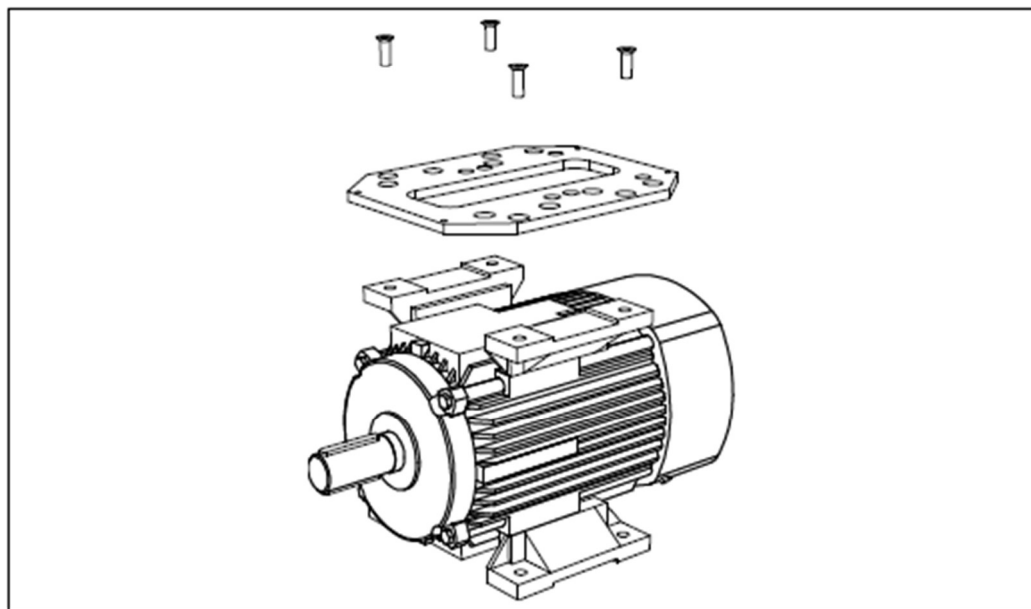


Figure 86. Mount the flange adapter on the motor

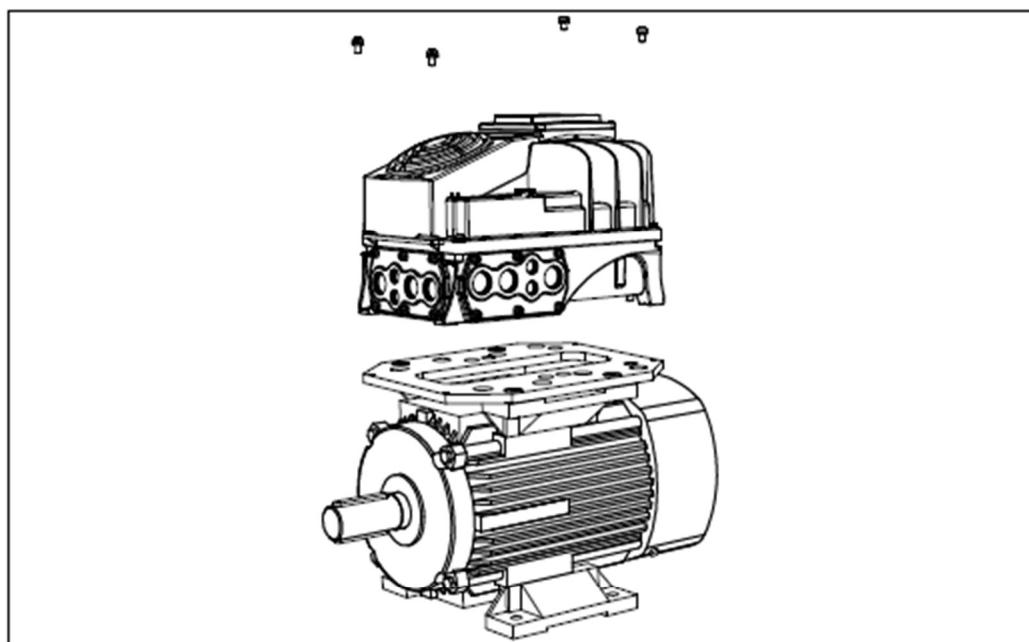


Figure 87. Mount the drive on the flange adapter using 4 screws

NOTE: Recommended screw type: countersunk head.

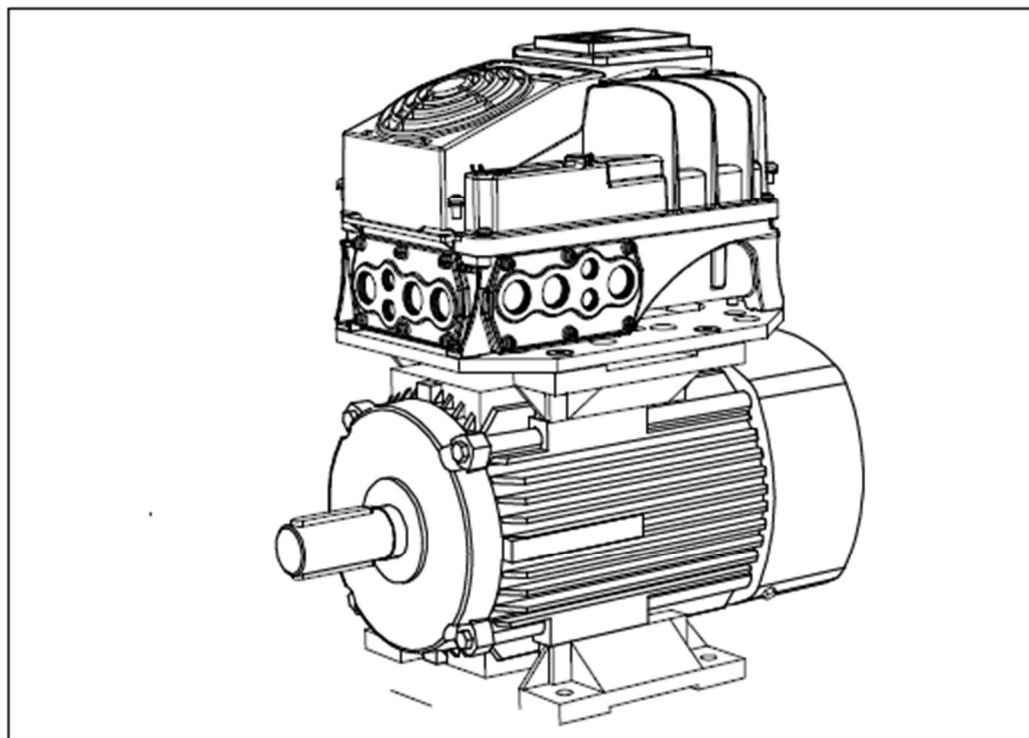


Figure 88. Drive mounted onto the motor