

# Application Note No. AP 2013/13-1

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## Topic: Different parameter values for DW16 motors with revision version 1.0 and 1.1

NOTICE	
<b>Material Damage!</b>	<p><b>Destruction of the motor by heating!</b></p> <p>Motors with the revision version 1.1 must not operate with the parameter values of the revision version 1.0, otherwise temperature damage will occur in the motor!</p> <p><b>Steps to prevent:</b></p> <ul style="list-style-type: none"> <li>• The motor must operate only with the parameter values mentioned on the type plate.</li> <li>• Enable the I<sup>2</sup>t-monitoring in ID32773 bit 14 = 1</li> <li>• Connect the temperature sensor of the motor winding to the converter</li> </ul>

DW16 motors must be parameterised depending of the revision version of the motor like follow:

Parameter on the type plate	Meaning	Parameter	Rev.: 1.0	Rev.: 1.1
I	'Motor nominal current IN'	ID111	127 A	140 A
IM	'Magnetising current'	ID32769	40 A	55 A
IM1	'Magnetising current 1'	ID32770	22 A	32 A
TR	'Rotor time constant'	ID32774	0.5 s	0.45 s
-	'Standstill current motor'	ID34096	130 A	158 A

Identification of the type plate with example motor DW16-300-4-IOW:

Rev.: 1.1

<b>AMK</b> Arnold Müller GmbH & Co. KG D-73230 Kirchheim/Teck		S.-Nr. A1039AD 1116 - 2136406		VDE 0530-T1-1995 MOT 3~		CE								
Type DW16-300-4-IOW		S1 1.1		LÜFTER/FAN		BREMSE/BRAKE								
P	60 kW	M	191 Nm	U	350 V	I	140 A	IP	54	U <sub>i</sub>	V	U <sub>0</sub>	V	
I <sub>M</sub>	56 A	I <sub>M1</sub>	32 A	T <sub>R</sub>	0,45 s	Encoder	1000K	P/Rev	ISO.-KL.	F	I <sub>L</sub>	A	I <sub>0</sub>	A
KD-Nr.		1840, 280, 366		n/n <sub>max</sub>		3000/6000		r/min		f <sub>L</sub>	Hz	M <sub>0</sub>	Nm	

Rev.: 1.0

<b>AMK</b> Arnold Müller GmbH & Co. KG D-73230 Kirchheim/Teck		S.-Nr. A1039AD 0551 - 473218		VDE 0530-T1-1995 MOT 3~		CE							
Type DW16-300-4-IOW				LÜFTER/FAN		BREMSE/BRAKE							
P	60 kW	M	191 Nm	U	350 V	I	127 A	IP	54	U <sub>i</sub>	V	U <sub>0</sub>	V
I <sub>M</sub>	40 A	I <sub>M1</sub>	22 A	T <sub>R</sub>	0,5 s	Encoder	1000HP/Rev.	ISO.-KL.	F	I <sub>L</sub>	A	I <sub>0</sub>	A
KD-Nr.				n/n <sub>max</sub>		3000/6000		r/min		f <sub>L</sub>	Hz	M <sub>0</sub>	Nm