

## **Megastar W Drives**

Legend:	
Replacement of component	R
Inspection (visual inspection, correction and replacement if needed)	I
Performance of on-site work (commissioning, tests, measurements, etc.)	Р

						Υ	ears	from	star	t-up	or fr	om p	art re	eplac	eme	nt					
	0	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Start-up	Р																				
Cooling																					
> Ion compound and mech.		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
filters									- ' '		- ' '				- ' '	- '			- '		
Cooling fan of SADT39POWP		R	<u> </u>	!	R			R	<u> </u>	!	I	<u> </u>		R		<u> </u>	R	!	L.	R	
Control rack fan (option)*1		R	<u> </u>	<u> </u>	R	+		R	<u> </u>	-	R	<u> </u>		R	+		R		H	R	
Cooling pump seals		- !			1	-	-	<u> </u>	-	-	÷		-	<u> </u>	-	-	+	<u> </u>	÷	I	-
<ul><li>Cooling pumps</li><li>6 mm pipes of the snubber</li></ul>		ı	ı ı	R		ı	ı	<u> </u>	!	<u> </u>	-	R	ı	<u> </u>	- 1	- 1	- 1	<u> </u>		R	-
circuit		R	-	ı	-	ı	-	R	-	ı	-	ı	-	R	-	ı	-	I	-	R	-
90D-connectors and pipes for chopper- and DC- chokes		- 1	- 1	R	1	- 1	- 1	1	1	-1	- 1	R	- 1	1	-1	-1	- 1	-1	-1	R	- 1
> O-ring kit for fast connectors		ı	ı	R	Ι	ı	ı	ı	ı	ı	ı	R	ı	ı	Т	ı	ı	ı	Т	R	ı
➤ Heat exchanger		ı	ı	Ι	Т	ı	ı	ı	ı	ı	Ι	ı	ı	ı	ı	ı	ı	ı	Τ	ı	ı
Aging																					
➤ Battery of CPU board (4.x - >)*1		R	ı	I	R	I	I	R	I	I	R	I	I	R	ı	I	R	I	-1	R	ı
<ul> <li>Battery of UPS (separately agreed)</li> </ul>		R	ı	R	I	R	I	R	I	R	1	R	I	R	ı	R	I	R	ı	R	ı
<ul> <li>Electrolytic capacitors</li> <li>(PA, PAU, MP, MN, SADT300)</li> </ul>		R	ı	ı	1	ı	ı	R	ı	ı	-1	I	ı	R	1	I	ı	I	-1	R	I
> Aux. power supply board SADC33POW and TIS300*1		I	I	R	ı	I	ı	I	I	I	ı	R	I	I	ı	ı	I	I	ı	R	ı
> SADT39POW(P)		1	1		Т		1			Т	R		-						Т		1
Chopper capacitors, AVX-W		i	Ť	Ħ	Ť	R	Ť	Η	Ť	ΙÌ	Ť	Η	İ	Η	Ť	R	Ť	i	Ť	ΙĖ	i
> Auxiliary chopper capacitors		i	i	R	ΙĖ	Ī	i	i	i	ΙÌ	i	R	i	i	i	ì	Ť	i	i	R	i
> Snubber capacitors		R	-	Ī	-	Ī	-	R	-	Ī	-	Ī	-	R	-	Ī	-	Ī	-	R	-
Discharge relays		Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р
> DC capacitors (CBU)		ı	- 1	R	П	ı	-	ı	1	ı	ı	R	-	ı	- 1	1	ı	ı	ı	R	-
RBU/fibre optics,snubber caps and pulse amplifiers		I	ı	R	1	ı	1	I	I	ı	1	R	1	I	1	1	1	ı	1	R	ı
Connections & Surroundings																					
➤ Fiber optic cables*2		Р		R		Р	-	Р		Р		R	- 1	Р		Р	-	Р		R	- 1
> Cable connections		ı	ı	Ι	Т	ı	I	Ι	Τ	I	I	Ι	ı	Ι	Ι	ı	ı	I	Т	ı	Ι
<ul> <li>Dustiness, corrosion and temperature</li> </ul>		ı	I	ı	ı	I	1	I	I	ı	-1	ı	I	I	ı	1	I	ı	-1	ı	-1
Quality of supply voltage		ı	ı	Ι	ı	ı	ı	ı	ı	I	ı	ı	ı	ı	ı	ı	ı	I	ı	ı	I
Improvements																					
> AMC- based control unit *3																					
➤ Upgrade of SADT39POW unit		1	1		Т	-	1			1			1					1			Т
> 5 um filter for cooling system		i	i	i	ΙĖ	i	i	i	i	ΙÌ	i	i	i	i	i	i	Ť	i	i	İ	Ť
Extra cooling for inverter unit		ı	i	İ	T	İ	İ	İ	i	Ť	İ	İ	İ	İ	İ	Ì	İ	Ť	İ	İ	Ī
> Based on product notes		ı	ı	ı	П	ı	ı	ı		ı	ı	ı	ı	ı	ı	ı	I	ı	1	1	I
Control Upgrade		•		•		•		•				•		•							
> PCBs, Power supplies		Р	ı	1	J	ı	ı	R	1	ı	1	1	ı	Р	ı	1	ı	1	1	R	- 1
> Door Fan		R	<u> </u>	H	H	+	-	R		<del>-                                    </del>		<del>'</del>	-	R		<del>                                     </del>		<del>-                                    </del>		R	
> Filter *4		R		H	R	i i	i	R		H	R	H	<u> </u>	R		<del>                                     </del>	R	l i		R	
> Updates/Improvements*5		1	i	<del>i</del>	Ť	i	i	ì	i	<del>i</del>	ì	<del>i</del>	i	Ť	i	<del>i</del>	ì	i i		ı,	Ė
Measurements						· ·				· ·		· ·				· · ·		· ·			
➤ Basic measurements with aux.		Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р
supply voltage  Measurements of specified components of converter		Р		Р		Р		Р		Р		Р		Р		Р		Р		Р	
components of converter  Spare Parts				<u> </u>				<u> </u>		<u> </u>		<u> </u>		<u> </u>				<u> </u>			
➤ Spare Parts* <sup>6</sup>	-																				

ABB	Maintenand	ce Schedule	DOC	DOCMSSAMID001					
Issued by	Date	Language	Revision	Page					
ABB Oy, Drives Service	2014-01-22	en	G	2 (2)					
		Distribution	External Pu	blic					

**Note!** Recommended service intervals and component replacements are based on the operational environment specified by ABB. Please refer to service instructions and product manuals for more information or go to <a href="https://www.abb.com/drivesservices">www.abb.com/drivesservices</a>.

\*Note! All previous vector control versions, vc2, vc4, vc5 and vc6 can be upgraded to AMC based control platform.

- \*1 Not required for units with Control-Upgrade
- \*2 FO-cables are replaced with Control-Upgrade
- \*3 Contact local ABB for information for control upgrade of SAMI Megastar W
- \*4 Depending on the ambient conditions filter mat might need to be replaced yearly/every second year.
- \*5 Improvements and updates are based on SW/HW development
- \*6 In-case of control upgrade all spare-parts should be listed and obsolete parts returned/disposed.