

Valid for drives manufactured or maintained in 2017 onwards.

Recommended maintenance intervals and component replacements are based on specified operational and environmental conditions. ABB recommends annual drive inspections to ensure the highest reliability and optimum performance. More detailed maintenance information can be found in maintenance instructions, product manuals and on the Internet.

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NOTE! Long term operation near the maximum specified ratings or environmental conditions may require shorter maintenance intervals for certain components. Check the device specific technical specifications in the relevant hardware manual and consult your local ABB Service for maintenance recommendations at:

www.abb.com/searchchannels

Legend

- I Inspection** (visual inspection and maintenance action if needed)
- P Performance** of on/off-site work (commissioning, tests, measurements or other work)
- R Replacement**

Functional safety actions	
Safety function test interval	I
Safety component expiry (Mission time T_M) 20 years	R

Recommended annual actions by the user	
Connections and environment	
Cabinet door filters IP54	R
Quality of supply voltage	P
Spare parts	
Spare parts	I
DC circuit capacitors reforming, spare modules and spare capacitors	P
Inspections by user	
IP22 and IP42 air inlet and outlet meshes	I
Tightness of terminals	I
Dustiness, corrosion and temperature	I
Heat sink cleaning	I
Other	
ABB-SACE Air circuit breaker maintenance	I

Cooling	Years from start-up						
	3	6	9	12	15	18	21
Main cooling fan							
R1i to R4i speed controlled LONG-LIFE			R			R	
R5i to R7i speed controlled LONG-LIFE			R			R	
D6D to D7D/D7T direct on line 50Hz LONG-LIFE			R			R	
D6D to D7D/D7T direct on line 60Hz LONG-LIFE			R			R	
D8D (50/60Hz) *			R			R	
R8i and D8T direct online 50Hz LONG-LIFE			R			R	
R8i and D8T direct online 60Hz LONG-LIFE			R			R	
LCL, L and BDCL direct online 50Hz LONG-LIFE			R			R	
LCL, L and BDCL direct online 60Hz LONG-LIFE			R			R	
¹⁾ 6 years interval if fan supply voltage is 400V instead of 320V		R ¹⁾	R	R ¹⁾		R / R ¹⁾	
D7T speed controlled *			R			R	
R8i and D8T speed controlled *			R			R	
Internal cooling fan for circuit boards							
R5i LONG-LIFE			R			R	
R8i and D8T *			R			R	
Cabinet cooling fan							
Internal LONG-LIFE 50Hz			R			R	
Internal LONG-LIFE 60Hz		R		R		R	
Door LONG-LIFE 50 Hz			R			R	
Door LONG-LIFE 60Hz			R			R	
IP54 50Hz*			R			R	
IP54 60Hz *		R		R		R	
NSIN filter cooling fan							
Filter cooling fan direct online 50Hz*			R			R	
Filter cooling fan direct online 60Hz*			R			R	

* Fan has been always "LONG-LIFE" type

Aging	Years from start-up						
	3	6	9	12	15	18	21
Common, control panel and control unit batteries							
ZCU/BCU control unit battery (Real-time clock)		R		R		R	
Control panel battery (Real-time clock)			R			R	
INU R1i...R4i							
JPU power unit (R1i and R2i)			R			R	
JCAP capacitor board (R3i and R4i)			R			R	
ZCU control unit				R			
INU R5i							
ZCU control unit				R			
INU, ISU R6i, R7i							
DC circuit electrolytic capacitors+discharg. resistors			R			R	
ZPOW module internal power supply board				R			
ZINT module internal circuit board				R			
ZCU control unit				R			
INU, ISU, DBU, RRU, DDC R8i							
DC circuit electrolytic capacitors+discharg. resistors			R			R	
BDPS,BFPS module internal power supply boards				R			
BINT, BGDR, BDFC module internal circuit boards				R			
Flat ribbon cables (when boards replaced)				R			
BCU control unit				R			
BSFC Cabinet side charging control board (INU only)				R			
DSU D7T, D8T							
BDPS, BFPS module internal power supply boards				R			
BINT, BTDR, BPCB, BDFC module internal circuit boards				R			
Flat ribbon cables (when boards replaced)				R			
BCU control unit				R			
Filter unit capacitors							
BLCL capacitor			R			R	
NSIN capacitor			R			R	

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Functional safety actions	
Safety function test interval	I
Safety component expiry (Mission time T_M) 20 years	R

Recommended annual actions by the user	
Connections and environment	
Cabinet door filters IP54	R
Quality of supply voltage	P
Spare parts	
Spare parts	I
DC circuit capacitors reforming, spare modules and spare capacitors	P
Inspections by user	
IP22 and IP42 air inlet and outlet meshes	I
Tightness of terminals	I
Dustiness, corrosion and temperature	I
Heat sink cleaning	I
Other	
ABB-SACE Air circuit breaker maintenance	I

Cooling	Years from start-up						
	3	6	9	12	15	18	21
Main cooling fan							
R1i to R4i speed controlled		R		R		R	
R5i to R7i speed controlled		R		R		R	
D6D to D7D/D7T direct on line 50Hz		R		R		R	
D6D to D7D/D7T direct on line 60Hz		R		R		R	
D8D (50/60Hz)			R			R	
R8i and D8T direct online 50Hz		R		R		R	
R8i and D8T direct online 60Hz		R		R		R	
LCL, L and BDCL direct online 50Hz		R		R		R	
LCL, L and BDCL direct online 60Hz LONG-LIFE							
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D7T speed controlled			R			R	
R8i and D8T speed controlled			R			R	
Internal cooling fan for circuit boards							
R5i	R	R	R	R	R	R	R
R8i and D8T			R			R	
Cabinet cooling fan							
Internal 50Hz		R		R		R	
Internal 60Hz	R	R	R	R	R	R	R
Door 50Hz		R		R		R	
Door 60Hz		R		R		R	
IP54 50Hz			R			R	
IP54 60Hz		R		R		R	
NSIN filter cooling fan							
Filter cooling fan direct online 50Hz			R			R	
Filter cooling fan direct online 60Hz			R			R	

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