

Cargotec. Keeping turnarounds brief.

Until the AF range was installed, voltage sags were affecting Cargotec's MacGregor deck cranes. Conventional contactors welded shut, leading to several stoppages a week. No longer. Known for superior quality and an ability to operate in the most hostile environments, MacGregor deck cranes enjoy a global reputation for reliability. A small but vital component, the AF contactor helps maintain this reputation.

To keep things moving, you need Control. Connect to Control.

Explore all our case studies at www.abb.com/connecttocontrol

SSAB Making certainty standard

Gamesa Taming the wind

LKAB Providing fresh air

ABB | Panorama

Contact us

ABB LVP

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Printed in Canada (June 2013)







ABB sets a new standard in motor control & power switching

Featuring AF technology as standard, the latest range of ABB contactors establishes a new industry benchmark. The electronically controlled coil offers multiple benefits over conventional alternatives, and together with ABB's wide product offering – an optimal configuration, every time.



The contactor and motor protection range from ABB is compatible with all major national and international standards and is available worldwide via a global distribution network. One contactor coil now handles 100V - 250V AC/DC for use in North America or Europe as well as Asia.



administration costs.





the features of the AF technology, along with access to drawings and coordination tables online, simplifies your design and assembly process

Panorama | ABB



By reducing contactor coil energy consumption by up to 80%, Time to prevent stoppages caused by voltage fluctuations. The panels can be built smaller and transformers more compact. All AF contactor ensures distinct operation in unstable networks and signifies a major advance in motor control and power switching. Voltage sags, dips and surges pose no threat. The AF contactor secures your uptime.

94340_ABB_panorama_star.indd 1

3-pole contactors, for motor control and power switching









VM19 (for same size contactors)

BER140-4









VM1650H

E1250DU (375...1250 A)

		225		1	EFF		WW		•	15 2 1		4		NO. IN	`									1		
Α	25	28	30	45	50	60	80	90	105	115	160	200	250	300	350	400	520	550	650	750	900	1210	1350	1650	2100	2700
	00	0	_	1	_	2	_	_	3	_	_	4	_	_	5	_	_	_	6	_	7	_	_	8	_	
Туре	AF09	AF12	AF16	AF26	AF30	AF40	AF52	AF65	AF80	AF96	AF116	AF140	AF190	AF205	AF265	AF305	AF370	AF400	AF460	AF580	AF750	AF1250	AF1350	AF1650	AF2050	AF2650
HP	0.75	1	1.5	2	2	3	3	5	7.5	7.5	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_
	1.5	2	3	3	5	7.5	10	15	15	20	_	_	_	_	_	_	_	_	_	_	_	_	_	<u> </u>	_	_
HP	2	3	5	7.5	10	10	15	20	25	30	30	40	50	60	75	100	125	125	150	200	250	_	_	_	_	_
	2	3	5	7.5	10	15	20	25	30	30	40	50	60	75	100	125	150	150	200	250	300	_	400	450	_	_
	5	7.5	10	15	20	30	40	50	60	60	75	100	125	150	200	250	300	350	400	500	600	_	800	900	_	_
	7.5	10	15	20	25	40	50	60	75	75	100	125	150	200	250	300	350	400	500	600	700	_	1000	1150	_	_

Main accessories Auxiliary contact blo

UL/CSA General use rating

AC / DC Control supply Maximum motor HP rating

NEMA NEMA Size

Auxilial y contact blocks	i ront mounting
	Side mounting
Timers	Electronic
Interlocking units	Mechanical
	Mechanical / Electrical
Connection sets	For reversing contactors
Surge suppressors	

locks	Front mounting	CA4-10 (1 x N.O.), CA4-01 (1 x N.
	Side mounting	CAL4-11 (1 x N.O. + 1 x N.C.)
	Electronic	TEF4-ON, TEF4-OFF

Tillers	LIGGROTIO
Interlocking units	Mechanical
	Mechanical / Electrical
Connection sets	For reversing contactors

	CA4-10 (1 x N.O.), CA4-01 (1 x N.C.)
•	CAL4-11 (1 x N.O. + 1 x N.C.)
•	TEF4-ON, TEF4-OFF
•	VM4

 CAL4-11 (1 x N.O. + 1 x N.O.	C.)
TEF4-ON, TEF4-OF	F
 VM4	
 VEM4	•
 BER16-4	BER38-4

	TEI
al	VM
al / Electrical	VE
ing contactors	BE

Mechanical
Mechanical / Electrical
 For reversing contactors

600 V

1 - phase, 120V

3 - phase, 208V

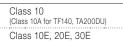
600V

lechanical / Electrical	V ⊏ IVI
or reversing contactors	BER ⁻
	Built-

r reversing contactors	BER16-4
	Built-in surg

Overload	relays	





Class 10 (Class 10A for TF140, TA200DU)
Class 10E, 20E, 30E

Thermal / magnetic protection

Magnetic only types

For contactor mounting

Class 10

	_
IU)	

TF4						
	TF4	•				
EF1	•••					
EF1			••	 • •		
: :	EF1	1				



MS116 (0.10...32 A) SCCR 18kA 480V, 5KA 600V

MS132 (0.10...32 A)

SCCR 30kA 480V, 18kA 600V

MO132 (0.16...32 A)

BEA16-4

SCCR 30kA 480V, 18kA 600V

F42 (0.1038 A)	
F 19 (0.1019 A)	EF19 (

8 A)		TF65 (2267 A)	TF96 (4096 A)
9 A)	EF19 (0.1019 A) EF45 (945 A)	EF65 (2570 A)	EF96 (36100 A)

)38 A)		TF65 (2267 A)	TF96 (4096 A)
)19 A)	EF19 (0.1019 A) EF45 (945 A)	EF65 (2570 A)	EF96 (36100 A)
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19 A)	EF19 (0.1019 A)	EF65 (2570 A)	EF96 (36100 A)	EI
	EF45 (945 A)		i	

MS450 (28...50 A)

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19 A)	EF19 (0.1019 A) EF45 (945 A)	EF65 (2570 A)	EF96 (3610
		l	

BEA38-4

		11 00 (22077)	11.00 (40007
19 A)	EF19 (0.1019 A) EF45 (945 A)	EF65 (2570 A)	EF96 (36100

(038 A)		I F65 (2267 A)	TF96 (4096 A)	1
(019 A)	EF19 (0.1019 A) EF45 (945 A)	EF65 (2570 A)	EF96 (36100 A)	Ε
			!	

BER65-4

38 A)		TF65 (2267 A)	TF96 (4096 A)	TI
19 A)	EF19 (0.1019 A) EF45 (945 A)	EF65 (2570 A)	EF96 (36100 A)	EI

		TF65 (2267 A)	TF96 (4096 A)	TF140
-	EF19 (0.1019 A)	EF65 (2570 A)	EF96 (36100 A)	EF146
	EF45 (945 A)		i	

	11 00 (22017)	11.00 (40007)	
EF19 (0.1019 A) EF45 (945 A)	EF65 (2570 A)	EF96 (36100 A)	EF14

A)	EF19 (0.1019 A) EF45 (945 A)	EF65 (2570 A)	EF96 (36100 A)	EF146 (5

	LE CO (EEE.HO! 7.)	i co (romoory	
19 (0.1019 A)	EF65 (2570 A)	EF96 (36100 A)	EF146
45 (945 A)		i I	
		1	

MS495 (45...100 A)

SCCR 65kA 480V/277V, 25kA 600V/347V

SCCR 65kA 480V/277V, 30kA 600V/347V

65 (2267 A)	TF96 (4096 A)	IF140 (66142 A)
·65 (2570 A)	EF96 (36100 A)	EF146 (54150 A)
	!	

MO495 (63...100 A)

(096 A)	IF140 (66142 A)	TA200DU (66200 A)	
36100 A)	EF146 (54150 A)	EF205 (63210 A)	EF370 (115380 A)

Short-circuit protection devices

Tmax Circuit breaker and fusible switches SCCR up to 100kA 600V

 EF205 (63210 A)	EF370 (115380 A)	EF

BER370-4

EF205 (63210 A)	EF370 (115380 A)	EF460 (

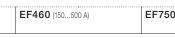


CAL18

VM750H, VM750V

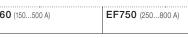
BEM460-30

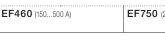






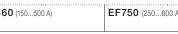














BEM750-30





















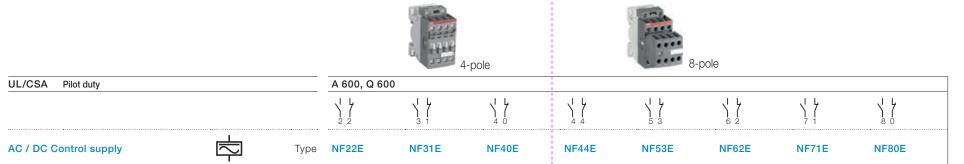
4-pole contactors





UL/CSA General use rating	600 V	Α	25	30	45	55	80	80	105
AC / DC Control supply	中	Туре	AF09	AF16	AF26	AF38	AF45	AF50	AF75

Contactor relays



R contactors





DC-1 Rated current up to 5000A DC-3/DC-5 Rated current up to 2000A 1500V with poles in series IOR.. 63-..-CC to IOR.. 5100-..-CC



AC Circuit switching

AC-3 Rated power up to 1500kW (1270A - 690V)



IOR.. 63-..-MT to IOR.. 5100-..-MT



AC/DC Coupling: LOR.. contactors Slip ring motor control: FOR .. contactors Field discharge: AM(F)-CC-JORE contactors AC/DC Switching (N.C./N.O. main poles): NOR & JOR contactors Latching contactors for energy saving and safety requirements: AMA or AME contactors

Specific contactors



UA16..RA to UA110..RA types



75A, 600V/DC 100A, 440V/DC GA75, GAE75 types



250 to 1900A, 600V/DC GAF185 to GAF2050 types



Definite Purpose

1, 2, 3, 4 pole DP20 to DP90

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Accessories

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