



C42 - Electrical Data

14.9.2011

Approvals:

Approved	Confirms to requirements	No listing required
CSA, CULUS, GOST	BS EN, CH, IEC	

BS EN...BS EN 60947 - British Standards Institution, **CCC...**CCC - China Compulsory Certification, **CH...**Schweizerischer Elektrotechnischer Verein, **CSA...**Canadian Standards Association, **CULUS...**Canadian National and United States Standards - Listed, **CURUS...**Canadian National and United States Standards - Recognized, **EMEA...**Lloyds Register EMEA, **GOST...**GOST - gosudarstvennyj standard, **IEC...**IEC 60947 - International Electrical Commission (IEC) Recommendation, **RuMRS...**Russian Maritime Register of Shipping

Note the remarks in the approval table!: www.krausnaimer.com

AC-Values:

IEC 60947-3, EN 60947-3, VDE 0660 part 107:

Rated Operational Voltage U _e	690V	1)
Rated Insulation Voltage U _i	690V	1)
Rated Thermal Current I _u /I _{th}	63A	2)
Breaking Capacity	220V-240V: 550A 380V-440V: 550A 660V-690V: 365A	2) 2) 2)
Disconnection property up to	690V	1)
Rated Operational Current I _e		
AC-20A No-load operation	63A	2)
AC-21A Switching of resistive loads, including moderate overloads		
For switching of power >1kW	63A	2)
AC-22A Switching of combined resistive or low inductive loads including moderate overloads	220V-500V: 63A 660V-690V: 63A	2) 2)
Rated Utilization Category		
AC-2 Slip ring motor starting, reversing and plugging, star-delta starting 3 phase, 3 pole	220V-240V: 18.5kW 380V-440V: 30kW 500V-500V: 40kW 660V-690V: 37kW	2) 2) 2) 2)
AC-3 Direct-on-line starting, star-delta starting		
3 phase, 3 pole	220V-240V: 11kW 380V-440V: 18.5kW 500V-500V: 18.5kW 660V-690V: 18.5kW	2) 2) 2) 2)
1 phase, 2 pole	110V-120V: 3kW 220V-240V: 6kW 380V-440V: 11kW	2) 2) 2)
AC-4 Direct-on-line starting, reversing, plugging and inching		
3 phase, 3 pole	220V-240V: 5.5kW 380V-440V: 7.5kW 500V-500V: 7.5kW 660V-690V: 7.5kW	2) 2) 2) 2)
1 phase, 2 pole	110V-120V: 1.2kW 220V-240V: 2.4kW 380V-440V: 4kW	2) 2) 2)
AC-23A Frequent switching of motors or other high inductive loads		
3 phase, 3 pole	220V-240V: 15kW 380V-440V: 30kW 500V-500V: 45kW 660V-690V: 40kW	2) 2) 2) 2)
1 phase, 2 pole	110V-120V: 4kW 220V-240V: 10kW 380V-440V: 18.5kW	2) 2) 2)
AC-23B Occasional switching of motors or other high inductive loads		
3 phase, 3 pole	220V-240V: 15kW 380V-440V: 30kW 660V-690V: 40kW	2) 2) 2)

1)...IEC 60947-3, EN 60947-3, VDE 0660 part 107 - Valid for lines with grounded common neutral termination, overvoltage category III, Other values on request.

2)...IEC 60947-3, EN 60947-3, VDE 0660 part 107

UL/Canada:

Rated Voltage	600V	1)
Rated Insulation Voltage U_i	600V	1)
Rated Thermal Current	65A	1)
Ampere Rating - Resistive or low inductive loads		
For switching of power >1kW	65A	1)
Ratings		
Standard motor load, DOL Rating (similar AC-3)		
3 phase, 3 pole	110V-120V: 220V-240V: 440V-480V: 550V-600V:	7.5HP 15HP 25HP 30HP 2)
1 phase, 2 pole	110V-120V: 220V-240V: 277V-277V: 440V-480V: 550V-600V:	3HP 7.5HP 7.5HP 15HP 20HP 2)
Heavy motor Load-reversing (similar AC-4)		
3 phase, 3 pole	110V-120V: 220V-240V: 440V-600V:	5HP 7.5HP 20HP 2)
1 phase, 2 pole	110V-120V: 220V-240V: 277V-277V:	2HP 5HP 5HP 2)
Pilot Duty, Heavy	A600	1)

1)...UL/Canada - Refer to International Standards and Approvals

2)...UL/Canada

General:

Minimum Voltage	on request	
Power loss per contact at I_u	1.7W	
Resistance to vibration	on request	
Resistance to shock	on request	
Rated Impulse Withstand Voltage U_{imp}	6kV	1)
Short Circuit Protection		
Max. fuse size (gL/gG-characteristic)	80A	
Rated short-time withstand current (1s-current)	1000A	
Ambient Temperature of Stages (for switches with electro-mechanical accessories refer to optional extra)		
open at 100% I_u/I_{th}	55°C during 24 hours with peaks up to 60°C	
enclosed at 100% I_{the}	35°C during 24 hours with peaks up to 40°C	
Storage temperature	-40°C to 85°C (in case of temperature below -5°C no shock load permissible)	
Terminal lead material	copper wires only	
Max. Permissible Wire Gage		
Single-core or stranded wire	2x16mm ² 2xAWG 6	
Flexible wire	2x10mm ² 2xAWG 6	
Flexible wire with sleeving in accordance with DIN 46228	2x10mm ²	

1)...IEC 60947-3, EN 60947-3, VDE 0660 part 107 - Valid for lines with grounded common neutral termination, overvoltage category III, Other values on request.