

Annex to the Getting Started with Altivar HVAC ATH600



NAT1615201

Short-Circuit Current Ratings (SCCR) and Branch Circuit Protection

The combinations in the table below have been tested per UL61800-5-1 (Reference UL file E116875). These ratings allow proper coordination of short circuit protection.

Altivar HVAC ATH600 drives are provided with integral overload and over-speed monitoring and can provide motor overload protection at 100% of the full load motor current. The motor thermal current [Motor Th Current] I_{th} must be set to the rated current indicated on the motor nameplate. For more information refer to the Altivar HVAC ATH600 Programming Manual (NAT19027).

The opening of the branch circuit protective device may be an indication that a fault current has been interrupted.

⚠ ⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

- Current-carrying parts and other components of the controller should be examined and replaced if damaged.
- If burnout of the current element of an overload relay occurs, the complete overload relay must be replaced.

Failure to follow these instructions will result in death or serious injury.

⚠ ⚠ DANGER

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Any association other than those provided, validated, or officially specified must undergo:

- complete normative testing,
- performed by a Certified Competent Body,
- confirming that 100% of the applicable standards remain fully covered.

Failure to follow these instructions will result in death or serious injury.

Without such testing and validation, system compliance can no longer be guaranteed, and Schneider Electric cannot be held responsible for any situation resulting from the customer's own choices or actions.

75°C (167°F) copper conductor with the AWG wire size shown on the nameplate for all sizes.

Suitable for use on a circuit capable of delivering not more than __X__ rms symmetrical kiloAmperes, __Y__ Volts maximum, when protected by __Z1__ with a maximum rating of __Z2__.

Altivar HVAC ATH600 Short Circuit Current Ratings ^{1 2} With Enclosure, Without Line reactor			Minimum Enclosure Volume		With Circuit Breaker		With GV●P				Fuses		Line Reactor Min Value ⁸		
Input Voltage 50/60 Hz (Y)	Power Ratings in Normal Duty				PowerPact ³ Catalog Number (Z1, Z2)	SCCR (X)	GV●P (Z1, Z2)			SCCR (X)	600 V Class J ⁶ (Z1, Z2)	SCCR (X)			
	(kW)	(HP)					Type E ⁴	Voltage Rating	Power ⁷						(A)
480 Vac Three- phase	0.75	1	ATH630U07N4Z	25	1536	H●L36015	22	GV2P07	480Y/277	1	22	6	100	-	-
	1.5	2	ATH630U15N4Z	25	1536	H●L36015	22	GV2P08	480Y/277	2	22	10	100	-	-
	2.2	3	ATH630U22N4Z	25	1536	H●L36015	22	GV2P10	480Y/277	3	22	10	100	-	-
	3	3	ATH630U30N4Z	25	1536	H●L36015	22	GV2P10	480Y/277	3	22	12	100	-	-
	4	5	ATH630U40N4Z	25	1536	H●L36015	22	GV2P14	480Y/277	5	22	15	100	-	-
	5.5	7.5	ATH630U55N4Z	25	1536	H●L36015	22	GV3P13	480Y/277	10	22	17.5	100	-	-
	7.5	10	ATH630U75N4Z	25	1536	H●L36020	22	GV3P18	480Y/277	10	22	25	100	-	-
	11	15	ATH630D11N4Z	25	1536	H●L36030	22	GV3P25	480Y/277	15	22	30	100	-	-
	15	20	ATH630D15N4Z	25	1536	H●L36040	22	GV3P32	480Y/277	20	22	40	100	-	-
	18	25	ATH630D18N4Z	25	1536	H●L36050	22	GV3P40	480Y/277	25	22	50	100	-	-
	22	30	ATH630D22N4Z	56	3390	H●L36080	100	GV3P40	480Y/277	25	65	60	100	-	-
	30	40	ATH630D30N4Z	115	7010	H●L36100	100	GV3P50	480Y/277	30	65	80	100	-	-
	37	50	ATH630D37N4Z	115	7010	H●L36125	100	GV3P65	480Y/277	40	65	90	100	-	-
	45	60	ATH630D45N4Z	115	7010	H●L36150	100	GV4PB80S	480Y/277	40	65	100	100	-	-
	55	75	ATH630D55N4Z	132	12039	J●L36175	100	GV4PB115S	480Y/277	60	65	150	100	-	-
	75	100	ATH630D75N4Z	132	12039	J●L36200	100	GV4PB115S	480Y/277	60	65	200	100	-	-
	90	125	ATH630D90N4Z	132	12039	J●L36250	100	GV5PB250S	480Y/277	150	65	200	100	-	-
	110	150	ATH630C11N4Z	478	29160	L●L36400	100	GV5PB250S	480Y/277	150	65	300	100	-	-
	132	200	ATH630C13N4Z	478	29160	L●L36600	100	GV6PB400S	480Y/277	250	65	400	100	-	-
	160	250	ATH630C16N4Z	478	29160	L●L36600	100	GV6PB400S	480Y/277	250	65	500	100	-	-
220	350	ATH630C22N4Z	878	53550	-	-	-	-	-	-	-	-	-	-	
250	400	ATH630C25N4Z	878	53550	-	-	-	-	-	-	-	-	-	-	

Altivar HVAC ATH600 Short Circuit Current Ratings ^{1 2} With Enclosure, With Line Reactor				Minimum Enclosure Volume		With Circuit Breaker		With GV●P				Fuses		Line Reactor Min Value ⁸	
Input Voltage 50/60 Hz (Y)	Power Ratings in Normal Duty		Catalog Number			PowerPact Catalog Number (Z1, Z2)	SCCR (X)	GV●P (Z1, Z2)			SCCR (X)	600 V Class J ⁶ (Z1, Z2)	SCCR (X)		
	(kW)	(HP)						Type E ⁴	Voltage Rating	Power ⁷					
			(L)	(in ³)	(kA)	–	(V)	(HP)	(kA)	(A)	(kA)	(mH)	(A)		
480 Vac Three-phase	0.75	1	ATH630U07N4Z	25	1536	H●L36015	65	GV2P07	480Y/277	1	65	–	–	2.4	4.8
	1.5	2	ATH630U15N4Z	25	1536	H●L36015	65	GV2P08	480Y/277	2	65	–	–	1.6	7.6
	2.2	3	ATH630U22N4Z	25	1536	H●L36015	65	GV2P10	480Y/277	3	65	–	–	1.1	11
	3	3	ATH630U30N4Z	25	1536	H●L36015	65	GV2P10	480Y/277	3	65	–	–	1.1	11
	4	5	ATH630U40N4Z	25	1536	H●L36015	65	GV2P14	480Y/277	5	65	–	–	0.9	14
	5.5	7.5	ATH630U55N4Z	25	1536	H●L36015	65	GV3P13	480Y/277	10	65	–	–	0.525	21
	7.5	10	ATH630U75N4Z	25	1536	H●L36020	65	GV3P18	480Y/277	10	65	–	–	0.5	28
	11	15	ATH630D11N4Z	25	1536	H●L36030	65	GV3P25	480Y/277	15	65	–	–	0.315	35
	15	20	ATH630D15N4Z	25	1536	H●L36040	65	GV3P32	480Y/277	20	65	–	–	0.4	46
	18	25	ATH630D18N4Z	25	1536	H●L36050	65	GV3P40	480Y/277	25	65	–	–	0.4	55
	22	30	ATH630D22N4Z	56	3390	–	–	–	–	–	–	–	–	–	–
	30	40	ATH630D30N4Z	115	7010	–	–	–	–	–	–	–	–	–	–
	37	50	ATH630D37N4Z	115	7010	–	–	–	–	–	–	–	–	–	–
	45	60	ATH630D45N4Z	115	7010	–	–	–	–	–	–	–	–	–	–
	55	75	ATH630D55N4Z	132	12039	–	–	–	–	–	–	–	–	–	–
	75	100	ATH630D75N4Z	132	12039	–	–	–	–	–	–	–	–	–	–
	90	125	ATH630D90N4Z	132	12039	–	–	–	–	–	–	–	–	–	–
	110	150	ATH630C11N4Z	478	29160	–	–	–	–	–	–	–	–	–	–
132	200	ATH630C13N4Z	478	29160	–	–	–	–	–	–	–	–	–	–	
160	250	ATH630C16N4Z	478	29160	–	–	–	–	–	–	–	–	–	–	
220	350	ATH630C22N4Z	878	53550	–	–	–	–	–	–	–	500	100	0.05	400
250	400	ATH630C25N4Z	878	53550	–	–	–	–	–	–	–	600	100	0.05	440

Altivar HVAC ATH600 Short Circuit Current Ratings ¹ UL Type 1, without Line Reactor			With GV●P				Fuses		Line Reactor Min Value ⁸		
Input Voltage 50/60 Hz (Y)	Power Ratings in Normal Duty		Catalog Number	GV●P (Z1, Z2)			SCCR (X)	600 V Class J ⁶ (Z1, Z2)			SCCR (X)
	(kW)	(HP)		Type E ⁴	Voltage Rating	Power ⁷					
				(V)	(HP)	(kA)	(A)	(kA)	(mH)	(A)	
480 Vac Three-phase	0.75	1	ATH630U07N4	GV2P07	480Y/277	1	5	6	100	-	-
	1.5	2	ATH630U15N4	GV2P08	480Y/277	2	5	10	100	-	-
	2.2	3	ATH630U22N4	GV2P10	480Y/277	3	5	10	100	-	-
	3	3	ATH630U30N4	GV2P10	480Y/277	3	5	12	100	-	-
	4	5	ATH630U40N4	GV2P14	480Y/277	5	5	15	100	-	-
	5.5	7.5	ATH630U55N4	GV3P13	480Y/277	10	5	17.5	100	-	-
	7.5	10	ATH630U75N4	GV3P18	480Y/277	10	5	25	100	-	-
	11	15	ATH630D11N4	GV3P25	480Y/277	15	5	30	100	-	-
	15	20	ATH630D15N4	GV3P32	480Y/277	20	5	40	100	-	-
	18	25	ATH630D18N4	GV3P40	480Y/277	25	5	50	100	-	-
	22	30	ATH630D22N4, ATH650D22N4	-	-	-	-	60	100	-	-
	30	40	ATH630D30N4, ATH650D30N4	-	-	-	-	80	100	-	-
	37	50	ATH630D37N4, ATH650D37N4	-	-	-	-	90	100	-	-
	45	60	ATH630D45N4, ATH650D45N4	-	-	-	-	100	100	-	-
	55	75	ATH630D55N4, ATH650D55N4	-	-	-	-	150	100	-	-
	75	100	ATH630D75N4, ATH650D75N4	-	-	-	-	200	100	-	-
	90	125	ATH630D90N4, ATH650D90N4	-	-	-	-	200	100	-	-
	110	150	ATH630C11N4Z ⁹	-	-	-	-	300	25	-	-
132	200	ATH630C13N4Z ⁹	-	-	-	-	400	25	-	-	
160	250	ATH630C16N4Z ⁹	-	-	-	-	500	25	-	-	
220	350	ATH630C22N4Z ¹⁰	-	-	-	-	-	-	-	-	
250	400	ATH630C25N4Z ¹¹	-	-	-	-	-	-	-	-	

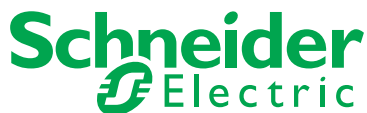
Altivar HVAC ATH600 Short Circuit Current Ratings ¹ UL Type 1, with Line Reactor			With GV _o P				Fuses		Line Reactor Min Value ⁸			
Input Voltage 50/60 Hz (Y)	Power Ratings in Normal Duty		Catalog Number	GV _o P (Z1, Z2)			SCCR (X)	600 V Class J ⁶ (Z1, Z2)	SCCR (X)			
	(kW)	(HP)		Type E ⁴	Voltage Rating	Power ⁷						(kA)
				-	(V)	(HP)						
480 Vac Three-phase	0.75	1	ATH630U07N4	GV2P07	480Y/277	1	65	6	100	2.4	4.8	
	1.5	2	ATH630U15N4	GV2P08	480Y/277	2	65	10	100	1.6	7.6	
	2.2	3	ATH630U22N4	GV2P10	480Y/277	3	65	10	100	1.1	11	
	3	3	ATH630U30N4	GV2P10	480Y/277	3	65	12	100	1.1	11	
	4	5	ATH630U40N4	GV2P14	480Y/277	5	65	15	100	0.9	14	
	5.5	7.5	ATH630U55N4	GV3P13	480Y/277	10	65	17.5	100	0.525	21	
	7.5	10	ATH630U75N4	GV3P18	480Y/277	10	65	25	100	0.5	28	
	11	15	ATH630D11N4	GV3P25	480Y/277	15	65	30	100	0.315	35	
	15	20	ATH630D15N4	GV3P32	480Y/277	20	65	40	100	0.4	46	
	18	25	ATH630D18N4	GV3P40	480Y/277	25	65	50	100	0.4	55	
	22	30	ATH630D22N4, ATH650D22N4	-	-	-	-	-	-	-	-	-
	30	40	ATH630D30N4, ATH650D30N4	-	-	-	-	-	-	-	-	-
	37	50	ATH630D37N4, ATH650D37N4	-	-	-	-	-	-	-	-	-
	45	60	ATH630D45N4, ATH650D45N4	-	-	-	-	-	-	-	-	-
	55	75	ATH630D55N4, ATH650D55N4	-	-	-	-	-	-	-	-	-
	75	100	ATH630D75N4, ATH650D75N4	-	-	-	-	-	-	-	-	-
	90	125	ATH630D90N4, ATH650D90N4	-	-	-	-	-	-	-	-	-
	110	150	ATH630C11N4Z ⁹	-	-	-	-	-	-	-	-	-
132	200	ATH630C13N4Z ⁹	-	-	-	-	-	-	-	-	-	
160	250	ATH630C16N4Z ⁹	-	-	-	-	-	-	-	-	-	
220	350	ATH630C22N4Z ¹⁰	-	-	-	-	500	18	0.05	400		
250	400	ATH630C25N4Z ¹¹	-	-	-	-	600	18	0.05	440		

Altivar HVAC ATH600 Short Circuit Current Ratings ¹ UL Type 12				Fuses	
Input Voltage 50/60 Hz (Y)	Power Ratings in Normal Duty		Catalog Number	600 V Class J ⁶ (Z1, Z2)	SCCR (X)
	(kW)	(HP)		(A)	(kA)
480 Vac Three-phase	0.75	1	ATH650U07N4, ATH650U07N4C	6	100
	1.5	2	ATH650U15N4, ATH650U15N4C	10	100
	2.2	3	ATH650U22N4, ATH650U22N4C	10	100
	3	3	ATH650U30N4, ATH650U30N4C	12	100
	4	5	ATH650U40N4, ATH650U40N4C	15	100
	5.5	7.5	ATH650U55N4, ATH650U55N4C	17.5	100
	7.5	10	ATH650U75N4, ATH650U75N4C	25	100
	11	15	ATH650D11N4, ATH650D11N4C	30	100
	15	20	ATH650D15N4, ATH650D15N4C	40	100
	18	25	ATH650D18N4, ATH650D18N4C	50	100
	22	30	ATH650D22N4U	60	100
	30	40	ATH650D30N4U	80	100
	37	50	ATH650D37N4U	90	100
	45	60	ATH650D45N4U	100	100
	55	75	ATH650D55N4U	150	100
75	100	ATH650D75N4U	200	100	
90	125	ATH650D90N4U	200	100	

1. The amp rating of the short circuit protection devices in the table are maximum values. Smaller amp sizes may be used. Branch circuit protection must be provided in accordance with the National Electrical Code and any additional local codes.
2. Ratings apply to an Altivar ATH600 drive mounted in a Type 1, 3R, 4(X) or 12 rated enclosure. Minimum enclosure volume allows for specified SCCR. Thermal requirements may require a larger enclosure.
3. Circuit breaker part number designations: ● = short circuit current rating.
For 480 V range, use ● = D for 18 kA, G for 35 kA, J for 65 kA, L for 100 kA, R for 100 kA, suitable for the rated short-circuit current of the electrical network.
4. For GV2P/3P use, 480 V ratings are for Wye connected electrical distribution systems. GV2P●● self protected manual combination starter must be used with GV2GH7 insulating barrier to meet UL 508 Type E rating. GV3P●● self protected manual combination starter must be used with GV3G66 + GVAM11 insulating barrier and auxiliary contact to meet UL 508 Type E rating. The GVAM11 provides a visual indication if the GV3P has tripped.
5. GV2P products detailed below can be used in place of the GV3P products for obtaining the ratings listed in the SCCR column for ratings listed lower than 10kA, or ratings limited to 10kA for ratings listed higher than 10kA.
GV2P16 for GV3P13, GV2P20 for GV3P18, GV2P22 for GV3P25.
6. Use Class CC or J fast acting or time delay.
7. Schneider Electric GV●P Type E combination motor controllers are adjustable, their current range is shown on the adjustment dial and their selection is based on the input current and not the power rating of the drive.
8. Reactor from Altivar ATH600 catalog or MTE series: RLW, do not substitute.
9. Apply to ATH630C11N4Z/ATH630C13N4Z/ATH630C16N4Z with optional UL Type 1 conformity kits VW3A9704.
10. Apply to ATH630C22N4Z with optional UL Type 1 conformity kits VW3A9212.
11. Apply to ATH630C25N4Z with optional UL Type 1 conformity kits VW3A9213.

Note:

- Integral solid state short circuit protection in the drive does not provide branch circuit protection. Branch circuit protection must be provided in accordance with the National Electrical Code and any local codes.
- The Altivar ATH600 drive has a 100 kA interrupt rating on the output of the drive. In addition to providing a rating based on shorting the output of the drive, these short circuit current ratings have been obtained by shorting components internal to the Altivar ATH600. These ratings allow proper coordination of short circuit protection.



MANUFACTURER
Schneider Electric Industries SAS
35 rue Joseph Monier
Rueil Malmaison 92500
France



UK REPRESENTATIVE
Schneider Electric Limited
Stafford Park 5
Telford, TF3 3BL
United Kingdom

China RoHS Hazardous Substances Table

The data shown in this spreadsheet are related to the following version of the China RoHS 2.0:
"Administrative Measures for the Restriction of Hazardous Substances in Electric Appliances and Electronic Products"
released January 21st 2016.

部件名称 Part Name	有害物质 - Hazardous Substances					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
金属部件 Metal Parts	x	o	o	o	o	o
塑料部件 Plastic Parts	o	o	o	o	o	o
电子件 Electronic	x	o	o	o	o	o
触点 Contacts	o	o	o	o	o	o
线缆和线缆附件 Cables and cabling accessories	o	o	o	o	o	o

本表格依据SJ/T11364的规定编制。
O: 表示该有害物质在该部件所有均质材料中的含量均在GB/T 26572规定的限量要求以下。
X: 表示该有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572规定的限量要求。

This table is made according to SJ/T 11364.

O: indicates that the concentration of hazardous substance in all of the homogeneous materials for this part is **below** the limit as stipulated in GB/T 26572.

X: indicates that concentration of hazardous substance in at least one of the homogeneous materials used for this part is **above** the limit as stipulated in GB/T 26572.

Преобразователь частоты серии Altivar

Основные параметры и характеристики указаны на маркировке изделия.

Наименование страны, где изготовлено изделие, указано на упаковке.

Преобразователь частоты предназначен для управления асинхронными и синхронными электродвигателями с постоянными магнитами (может отличаться для разных типов преобразователей частоты).

Безопасность применения оборудования обеспечивается его эксплуатацией в установленных изготовителем условиях квалифицированным персоналом.

Правила и условия монтажа, хранения, перевозки (транспортирования), реализации и утилизации согласно инструкции по эксплуатации, размещенной на сайте изготовителя.

Отключите силовое питание от преобразователя частоты в случае возникновения не сбрасываемой неисправности и дождитесь погасания экрана графического терминала.

Найдите причину неисправности и устраните ее.

Подключите питание: это приведет к сбросу блокировки преобразователя частоты по ошибке, если причина возникновения устранена.

В некоторых случаях может произойти автоматический повторный запуск в работу после исчезновения неисправности и сброса ошибки, если эта функция была запрограммирована.

Уполномоченный поставщик в РФ:

АО «Шнейдер Электрик»

Адрес: 127018, Россия, г. Москва, ул. Двинцев, д.12, корп.1

Тел. +7 (495) 777 99 90

Факс +7 (495) 777 99 92

Дата изготовления указана на упаковке (под текстом "Made in"): PPYYWW, где PP – код завода, YY – год изготовления, WW – номер недели изготовления.

Altivar сериясының жиілік түрлендіргіші

Негізгі параметрлер мен сипаттамалар өнімнің жапсырмасында көрсетілген. Өнім шығарылған мемлекеттің атауы қаптамада көрсетілген.

Жиілік түрлендіргіші тұрақты магниттері бар асинхронды және синхронды электр қозғалтқыштарын басқаруға арналған (жиілік түрлендіргіштерінің әр түрлі типтері үшін әр түрлі болуы мүмкін).

Жабдықты пайдалану қауіпсіздігі оның өндіруші белгілеген жағдайларда білікті маманның жұмыс жасауымен қамтамасыз етіледі.

Өндірушінің веб-сайтында пайдалану жөніндегі нұсқаулыққа сәйкес орнату, сақтау, тасымалдау, сату және жою ережелері мен шарттары көрсетілген.

Қалпына келтіруге болмайтын ақаулық туындаған жағдайда электр желісін реттелетін жиіліктік жетектен ажыратыңыз және графикалық дисплей терминалы сөнгенше күтіңіз.

Мәселенің себебін тауып, оны түзетіңіз.

Қуатты қосыңыз: егер бұл себеп жойылған болса, жиілік түрлендіргішінің құлыпталуын қайта қалпына келтіреді.

Кейбір жағдайларда ақаулық жойылып, құлыпталуы қайта қалпына келтірілгеннен кейін, автоматты түрде қайта іске қосылуы мүмкін, егер бұл функция бағдарламаланған болса.

Қазақстан Республикасында ресми жеткізуші:

ЖШС «Шнейдер Электрик»

Мекен-жайы: Қазақстан Республикасы, Алматы қ., Достық даң., «Кен Дала»

Бизнес Орталығы, 5-ші қабат.

Тел.: +7 (727) 357 23 57

Факс.: +7(727) 357 24 39

Дайындалу күні қаптамада көрсетілген (мәтіннің астында көрсетілген "Made in"): PPYYWW, мұндағы PP - зауыт коды, YY - дайындалу жылы, WW – дайындалу аптасы.