



Fireeye VFD Specification

Specification Reference: 30000268

Valid from 07/01/2016 to 12/31/2017



230Vac

3-phase supply voltage 208, 230 or 240 V - Power ratings are valid at nominal voltage, 208V

Fireye Part Number	Type Code UL Type 12 (NEMA 12)	Nominal Ratings		Base Drive Frame	Dim Ref
		Normal Duty (CT) (110% I2N)			
		I2N A	PN HP		
Drive with Bypass and Circuit Breaker Disconnect					
NXVFD123A	ACS550-CC-04A6-2+B055+F267+X1606	4.6	1	R1	CX12-1
NXVFD223A	ACS550-CC-07A5-2+B055+F267+X1606	7.5	2	R1	CX12-1
NXVFD323A	ACS550-CC-012A-2+B055+F267+X1606	11.8	3	R1	CX12-1
NXVFD523A	ACS550-CC-017A-2+B055+F267+X1606	16.7	5	R1	CX12-1
NXVFD723A	ACS550-CC-024A-2+B055+F267+X1606	24.2	7.5	R2	CX12-3
NXVFD1023A	ACS550-CC-031A-2+B055+F267+X1606	30.8	10	R2	CX12-3
NXVFD1523A	ACS550-CC-046A-2+B055+F267+X1606	46.2	15	R3	CX12-5
NXVFD2023A	ACS550-CC-059A-2+B055+F267+X1606	59.4	20	R3	CX12-5
NXVFD2523A	ACS550-CC-075A-2+B055+F267+X1606	74.8	25	R4	CX12-6
NXVFD3023A	ACS550-CC-088A-2+B055+F267+X1606	88	30	R4	CX12-7
NXVFD4023A	ACS550-CC-114A-2+B055+F267+X1606	114	40	R4	CX12-7
NXVFD5023A	ACS550-CC-143A-2+B055+F267+X1606	143	50	R6	CX12-10*
NXVFD6023A	ACS550-CC-178A-2+B055+F267+X1606	178	60	R6	CX12-10*
NXVFD7523A	ACS550-CC-221A-2+B055+F267+X1606	221	75	R6	CX12-10*
NXVFD10023A	ACS550-CC-248A-2+B055+F267+X1606	248	100	R6	CX12-10*
Drive with Disconnect Switch and Drive Fuses					
NXVFD12A	ACS550-PD-04A6-2+B055+X1606	4.6	1	R1	PX12-1
NXVFD22A	ACS550-PD-07A5-2+B055+X1606	7.5	2	R1	PX12-1
NXVFD32A	ACS550-PD-012A-2+B055+X1606	11.8	3	R1	PX12-1
NXVFD52A	ACS550-PD-017A-2+B055+X1606	16.7	5	R1	PX12-1
NXVFD72A	ACS550-PD-024A-2+B055+X1606	24.2	7.5	R2	PX12-2
NXVFD102A	ACS550-PD-031A-2+B055+X1606	30.8	10	R2	PX12-2
NXVFD152A	ACS550-PD-046A-2+B055+X1606	46.2	15	R3	PX12-3
NXVFD202A	ACS550-PD-059A-2+B055+X1606	59.4	20	R3	PX12-3
NXVFD252A	ACS550-PD-075A-2+B055+X1606	74.8	25	R4	PX12-4
NXVFD302A	ACS550-PD-088A-2+B055+X1606	88	30	R4	PX12-5
NXVFD402A	ACS550-PD-114A-2+B055+X1606	114	40	R4	PX12-5
NXVFD502A	ACS550-PD-143A-2+B055+X1606	143	50	R6	PX12-6
NXVFD602A	ACS550-PD-178A-2+B055+X1606	178	60	R6	PX12-6
NXVFD752A	ACS550-PD-221A-2+B055+X1606	221	75	R6	PX12-6
NXVFD1002A	ACS550-PD-248A-2+B055+X1606	248	100	R6	PX12-6

* Denotes Floor Standing



460Vac

3-phase supply voltage 380 - 460V - Power ratings are valid at nominal voltage, 460V

Fireye Part Number	Type Code UL Type 12 (NEMA 12)	Nominal Ratings		Base Drive Frame	Dim Ref
		Normal Duty (CT) (110% I2N)			
		I2N A	PN HP		
Drive with Bypass and Circuit Breaker Disconnect					
NXVFD143A	ACS550-CC-03A3-4+B055+F267+X1606	3.3	1.5	R1	CX12-1
NXVFD243A	ACS550-CC-04A1-4+B055+F267+X1606	4.1	2	R1	CX12-1
NXVFD343A	ACS550-CC-06A9-4+B055+F267+X1606	6.9	3	R1	CX12-1
NXVFD543A	ACS550-CC-08A8-4+B055+F267+X1606	8.8	5	R1	CX12-1
NXVFD743A	ACS550-CC-012A-4+B055+F267+X1606	11.9	7.5	R1	CX12-1
NXVFD1043A	ACS550-CC-015A-4+B055+F267+X1606	15.4	10	R2	CX12-2
NXVFD1543A	ACS550-CC-023A-4+B055+F267+X1606	23	15	R2	CX12-2
NXVFD2043A	ACS550-CC-031A-4+B055+F267+X1606	31	20	R3	CX12-4
NXVFD2543A	ACS550-CC-038A-4+B055+F267+X1606	38	25	R3	CX12-4
NXVFD3043A	ACS550-CC-045A-4+B055+F267+X1606	44	30	R3	CX12-5
NXVFD4043A	ACS550-CC-059A-4+B055+F267+X1606	59	40	R4	CX12-6
NXVFD5043A	ACS550-CC-072A-4+B055+F267+X1606	72	50	R4	CX12-6
NXVFD6043A	ACS550-CC-078A-4+B055+F267+X1606	77	60	R4	CX12-6
NXVFD7543A	ACS550-CC-097A-4+B055+F267+X1606	96	75	R4	CX12-7
NXVFD10043A	ACS550-CC-125A-4+B055+F267+X1606	124	100	R5	CX12-8
NXVFD12543A	ACS550-CC-157A-4+B055+F267+X1606	157	125	R6	CX12-9
NXVFD15043A	ACS550-CC-180A-4+B055+F267+X1606	180	150	R6	CX12-9
NXVFD20043A	ACS550-CC-246A-4+B055+F267+X1606	245	200	R6	CX12-10*
Drive with Disconnect Switch and Drive Fuses					
NXVFD14A	ACS550-PD-03A3-4+B055+X1606	3.3	1.5	R1	PX12-1
NXVFD24A	ACS550-PD-04A1-4+B055+X1606	4.1	2	R1	PX12-1
NXVFD34A	ACS550-PD-06A9-4+B055+X1606	6.9	3	R1	PX12-1
NXVFD54A	ACS550-PD-08A8-4+B055+X1606	8.8	5	R1	PX12-1
NXVFD74A	ACS550-PD-012A-4+B055+X1606	11.9	7.5	R1	PX12-1
NXVFD104A	ACS550-PD-015A-4+B055+X1606	15.4	10	R2	PX12-2
NXVFD154A	ACS550-PD-023A-4+B055+X1606	23	15	R2	PX12-2
NXVFD204A	ACS550-PD-031A-4+B055+X1606	31	20	R3	PX12-3
NXVFD254A	ACS550-PD-038A-4+B055+X1606	38	25	R3	PX12-3
NXVFD304A	ACS550-PD-045A-4+B055+X1606	44	30	R3	PX12-3
NXVFD404A	ACS550-PD-059A-4+B055+X1606	59	40	R4	PX12-4
NXVFD504A	ACS550-PD-072A-4+B055+X1606	72	50	R4	PX12-4
NXVFD604A	ACS550-PD-078A-4+B055+X1606	77	60	R4	PX12-4
NXVFD754A	ACS550-PD-097A-4+B055+X1606	96	75	R4	PX12-5
NXVFD1004A	ACS550-PD-125A-4+B055+X1606	124	100	R5	PX12-5
NXVFD1254A	ACS550-PD-157A-4+B055+X1606	157	125	R6	PX12-6
NXVFD1504A	ACS550-PD-180A-4+B055+X1606	180	150	R6	PX12-6
NXVFD2004A	ACS550-PD-246A-4+B055+X1606	245	200	R6	PX12-6

* Denotes Floor Standing



600Vac

3-phase supply voltage 500, 525, 550, 575, or 600V - Power ratings are valid at nominal voltage, 600V

Fireye Part Number	Type Code UL Type 12 (NEMA 12)	Nominal Ratings		Base Drive Frame	Dim Ref
		Normal Duty (CT) (110% I2N)			
		I2N A	PN HP		
Drive with Bypass and Disconnect Switch & Fuses					
NXVFD263A	ACS550-CF-02A7-6+B055+F267+X1606	2.7	2	R2	CX12-2
NXVFD363A	ACS550-CF-03A9-6+B055+F267+X1606	3.9	3	R2	CX12-2
NXVFD563A	ACS550-CF-06A1-6+B055+F267+X1606	6.1	5	R2	CX12-2
NXVFD763A	ACS550-CF-09A0-6+B055+F267+X1606	9	7.5	R2	CX12-2
NXVFD1063A	ACS550-CF-011A-6+B055+F267+X1606	11	10	R2	CX12-2
NXVFD1563A	ACS550-CF-017A-6+B055+F267+X1606	17	15	R2	CX12-2
NXVFD2063A	ACS550-CF-022A-6+B055+F267+X1606	22	20	R3	CX12-4
NXVFD2563A	ACS550-CF-027A-6+B055+F267+X1606	27	25	R3	CX12-4
NXVFD3063A	ACS550-CF-032A-6+B055+F267+X1606	32	30	R4	CX12-6
NXVFD4063A	ACS550-CF-041A-6+B055+F267+X1606	41	40	R4	CX12-6
NXVFD5063A	ACS550-CF-052A-6+B055+F267+X1606	52	50	R4	CX12-6
NXVFD6063A	ACS550-CF-062A-6+B055+F267+X1606	62	60	R4	CX12-6
NXVFD7563A	ACS550-CF-077A-6+B055+F267+X1606	77	75	R6	CX12-9
NXVFD10063A	ACS550-CF-099A-6+B055+F267+X1606	99	100	R6	CX12-9
NXVFD12563A	ACS550-CF-125A-6+B055+F267+X1606	125	125	R6	CX12-9
NXVFD15063A	ACS550-CF-144A-6+B055+F267+X1606	144	150	R6	CX12-9
Drive with Disconnect Switch and Drive Fuses					
NXVFD26A	ACS550-PD-02A7-6+B055+X1606	2.7	2	R2	PX12-2
NXVFD36A	ACS550-PD-03A9-6+B055+X1606	3.9	3	R2	PX12-2
NXVFD56A	ACS550-PD-06A1-6+B055+X1606	6.1	5	R2	PX12-2
NXVFD76A	ACS550-PD-09A0-6+B055+X1606	9	7.5	R2	PX12-2
NXVFD106A	ACS550-PD-011A-6+B055+X1606	11	10	R2	PX12-2
NXVFD156A	ACS550-PD-017A-6+B055+X1606	17	15	R2	PX12-2
NXVFD206A	ACS550-PD-022A-6+B055+X1606	22	20	R3	PX12-3
NXVFD256A	ACS550-PD-027A-6+B055+X1606	27	25	R3	PX12-3
NXVFD306A	ACS550-PD-032A-6+B055+X1606	32	30	R4	PX12-4
NXVFD406A	ACS550-PD-041A-6+B055+X1606	41	40	R4	PX12-4
NXVFD506A	ACS550-PD-052A-6+B055+X1606	52	50	R4	PX12-4
NXVFD606A	ACS550-PD-062A-6+B055+X1606	62	60	R4	PX12-4
NXVFD756A	ACS550-PD-077A-6+B055+X1606	77	75	R6	PX12-6
NXVFD1006A	ACS550-PD-099A-6+B055+X1606	99	100	R6	PX12-6
NXVFD1256A	ACS550-PD-125A-6+B055+X1606	125	125	R6	PX12-6
NXVFD1506A	ACS550-PD-144A-6+B055+X1606	144	150	R6	PX12-6

* Denotes Floor Standing



ACS550-PD Package Drive with Disconnect - Overview

- 1) The ACS550 Package Drive with Disconnect is an ACS550 Variable Frequency Drive with an input disconnect switch and fast acting fuses.
- 2) The disconnect includes a door-mounted operator's handle (pad lockable in the OFF position), local operator keypad with graphics display, electronic motor overload protection and provisions for external control connections.
- 3) This package is rated UL Type 12 (NEMA 12). All units are wall mounted. See PX12 Photo & Dimensions.
- 4) A "Preconfigured" file of Fireye drive parameters are loaded into the keypad/drive. These are application related and not voltage or power related.
- 5) Fireye Logo on the enclosure door or keypad eyebrow.
- 6) Standard Delivery is 2 to 3 weeks.

ACS550-CC/CF Package Drive with Bypass - Overview

- 1) This ACS550 Package Drive is an ACS550 Variable Frequency Drive with Two Bypass Contactors that will allow the motor to be run at full voltage in the event the drive is shut down for service. A main circuit breaker or fused disconnect (-CF for 600V), drive fuses, two electrically interlocked contactors, motor overload relay and a service switch for the drive are mounted and wired within the enclosure.
- 2) Qty. 1 NO (10Amp) Aux Contact from 1M (Drive) and Qty. 2 NO (10Amp) Aux Contacts from 2M (Bypass) will be wired to terminals for customer use.
- 3) The disconnect includes a door-mounted operator's handle (pad lockable in the OFF position). A local operator keypad with graphics display and a Drive/Off/Bypass Selector Switch are also mounted on the enclosure door.
- 4) Fireye will provide the 115Vac, 1Phase, 60Hz Control Power. VA requirements are based on HP size to cover any inrush from the contactors.
- 5) Start/Stop is a hardwired output from Fireye's Controller to ABB Start Relay. Speed reference is provided to the drive via 4-20ma signal. An analog output signal of 4-20ma for motor speed (0-60Hz) will be provided to Fireye.
- 6) This package is rated UL Type 12 (NEMA 12). All units are wall mounted unless noted². See CX12 Photo & Dimensions.
- 7) A "Preconfigured" file of Fireye drive parameters are loaded into the keypad/drive. These are application related and not voltage or power related.
- 8) Fireye Label on the enclosure door.
- 9) Standard delivery is 3 to 5 weeks.

Comments

- 1) All sizing is based on Normal Duty = 110% OL for 60 Seconds
- 2) Unless denoted, all units are Wall Mounted. * - Denotes Floor Standing. Dimension CX12-10



PX12 - 1 Thru 4



**PX12 - 5 & 6,
CX12 - 1 Thru 9**

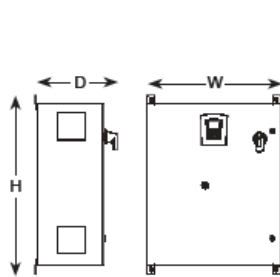


VFD Drive Module Specification

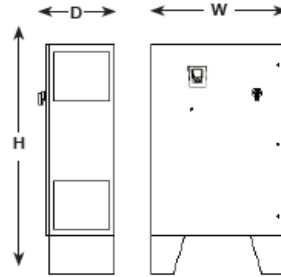
Input ratings	Input voltage range	3~208/220/230/240, 3~380/400/415/440/460/480, 3~500/525/550/575/600
	Input voltage tolerance	+10% / -15%
	Phase	3~, 1~ with 50% de-rate on 230V units
	Frequency	48 to 63 Hz
	Short circuit rating (UL 508c)	100,000 rms symmetrical amperes up to 600 V
Output ratings	Horsepower	Normal Duty Ratings: 230V = 1-100HP, 460V = 1.5-550HP, 600V = 2-150HP
	Overload Capacity	Normal Duty: 110% of I2N for 1 minute every 10 minutes
	Frequency	0 to 500 Hz
	Voltage	0 to Input Supply Voltage level, 3 phase symmetrical, Umax at the field weakening point
	Motor types	3~ Induction Motors
Protective features	Overcurrent	Excessive output current
	DC overvoltage	High DC Bus
	Overtemp	Drive heatsink above operating temperature
	Short circuit	Short on motor input terminals
	Undervoltage	Low voltage on drive input
	Loss of reference	Analog Input programmed for 4-20mA but signal less than 4mA
	Motor overtemp	Excessive estimated motor temperature
	Loss of keypad	Drive will trip if under Keypad Control and keypad communication is lost
	Motor stall	Motor cannot achieve commanded speed due to excessive load
	Ground fault	Ground fault detected in motor or motor cabling
Environmental	Motor phase fault	Loss of one of the motor phases
	Temperature	-10 to 40°C, 40 to 50°C with derate
	Cooling	Forced air
	Enclosure	UL Type 12
	Altitude	Sea level up to 3,300 ft (1,000m) Derate 1% per 330 ft (100m) up to 6,600 ft (2,000m)
	Humidity	0 to 95% RH Non-Condensing
Keypad display	Vibration	Seismic Certified (includes ACS550-PD, Not available for ACS550-CC/CF)
	Display	LCD Graphical
	Keys	8 key keypad with tactile response
	Functions	Output status monitoring, Digital speed control, Parameter setting and display, Diagnostic and Fault log display, Motor run, Local/Remote toggle
	Remote mount	Keypad may be mounted up to 10 ft, using appropriate cable (see Options for kit)
Control specifications	Trip	Last three faults stored in Fault History
	Switching frequency	1, 4, 8, 12kHz (up to 150hp): 1 or 4kHz (over 150hp)
	Accel/decel	0-1800 seconds
	Speed control accuracy	20% of motor slip
	Skip frequencies	Three zones 0-Max frequency
	Driveware options	Drive Window Lite
	Maximum output frequency	500 Hz
Analog inputs	Selectable operating modes	ABB Standard (2-Wire), 3-Wire, Alternate, Motor Potentiometer, Hand-Auto, PID Control, PFC Control, Torque Control
	Two Single-ended	0 (2) to 10 V, Rin > 312kΩ single-ended; 0 (4) to 20mA, Rin = 100 Ω single-ended
Analog outputs	Resolution	± 1%
	Two current outputs	0 (4) to 20 mA, load < 500 Ω
Digital inputs	Resolution	± 3%
	Six digital inputs	12V... 24V DC with internal or external supply, Pull-up or Pull-down (PNP or NPN)
Digital outputs	Input impedance	2.4 kΩ
	Three relay outputs	Form C
	Maximum switching voltage	250V AC/30 V DC
	Maximum continuous current	2 A rms



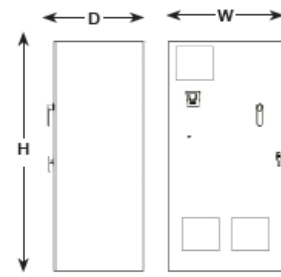
Dimensions



Wall mount (CX12-1 to CX12-9)



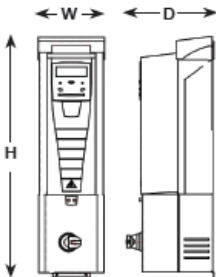
Wall mount (CX12-10)



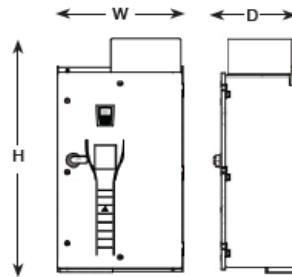
Floor standing (CX12-11 to CX12-12)

ACS550-Cx NEMA 12 / UL Type 12

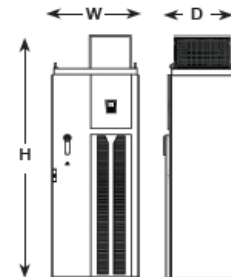
Dim	Mounting Dimensions					Shipping Dimensions						Weight		Dimension Drawing
	Height (H1)	Width (W1)	Height (H)	Width (W)	Depth (D)	Height (H)	Width (W)	Depth (D)	Height (H)	Width (W)	Depth (D)	lb	kg	
	in	mm	in	mm	Mounting Hardware	in	mm	in	mm	in	mm			
CX12-1	25.5	648	16.5	419	0.375	27	686	18	457	14.5	368	79	36	3AUA0000012801 - sheet 4
CX12-2	25.5	648	16.5	419	0.375	27	686	18	457	14.5	368	84	38	3AUA0000012801 - sheet 4
CX12-3	31.5	800	22.5	572	0.375	33	838	24	610	14.5	368	112	51	3AUA0000012802 - sheet 4
CX12-4	31.5	800	22.5	572	0.375	33	838	24	610	14.5	368	141	64	3AUA0000012802 - sheet 4
CX12-5	37.5	953	28.5	724	0.375	39	991	30	762	14.5	368	172	78	3AUA0000012803 - sheet 4
CX12-6	37.5	953	28.5	724	0.375	39	991	30	762	14.5	368	205	93	3AUA0000012803 - sheet 4
CX12-7	49.5	1257	34.5	876	0.375	51.4	1306	36	914	22.5	572	260	118	3AUA0000012804 - sheet 4
CX12-8	49.5	1257	34.5	876	0.375	51.4	1306	36	914	22.5	572	324	147	3AUA0000012804 - sheet 4
CX12-9	49.5	1257	34.5	876	0.375	51.4	1306	36	914	22.5	572	401	182	3AUA0000012804 - sheet 4
CX12-10	Free Standing				Ø0.56	72	1829	36	914	23	584	545	248	3AUA0000012805 - sheet 4



Wall mount (PX12-1 to PX12-4)



Wall mount (PX12-5 to PX12-6)



Floor standing (PX12-8)

ACS550-Px UL Type 12 / NEMA 12

Dim	Mounting Dimensions					Shipping Dimensions						Weight		Dimension Drawing
	Height (H1)	Width (W1)	Height (H)	Width (W)	Depth (D)	Height (H)	Width (W)	Depth (D)	Height (H)	Width (W)	Depth (D)	lb	kg	
	in	mm	in	mm	Mounting Hardware	in	mm	in	mm	in	mm			
PX12-1	28	711	3.9	99	0.25	29.3	744	8.7	221	11.2	284	37	17	3AUA0000008216 - sheet 2
PX12-2	32	813	3.9	99	0.25	33.2	843	8.7	221	11.6	295	46	21	3AUA0000008218 - sheet 2
PX12-3	38.7	983	6.3	160	0.25	40.6	1031	10.5	267	11.9	302	79	36	3AUA0000008220 - sheet 2
PX12-4	44	1118	6.3	160	0.25	45.8	1163	10.5	267	13.1	333	99	45	3AUA0000008221 - sheet 2
PX12-5	46.3	1176	23.6	599	0.375	54.3	1379	28.1	714	19	483	267	121	3AUA0000021149 - sheet 1
PX12-6	46.3	1176	23.6	599	0.375	54.3	1379	28.1	714	19	483	359	163	3AUA0000021149 - sheet 1
PX12-8	Free Standing				Ø0.63	93.6	2377	31.7	805	25.9	658	838	381	3AUA0000021153 - sheet 1