

EnForcer[®]

MOTIVE POWER CHARGERS

IMPAQ[™]

Modular Charger Solutions: Setting the Standard



EnForcer[®] IMPAQ[™]

MOTIVE POWER CHARGERS



Optimized charging for a range of applications

The EnForcer[®] IMPAQ[™] and IMPAQ+ modular chargers from EnerSys[®] represent the best-in-class high frequency charging solutions for all applications in the field of material handling equipment, automated guided vehicle systems, cleaning machines and industrial electric vehicles. Whether free-standing or wall-mounted, EnForcer IMPAQ high frequency chargers are the most compact to date, offering intelligent charging with advanced efficiency and flexibility.

PEAK PERFORMANCE AND RELIABILITY

EnForcer IMPAQ charger modules are automatically switched off and on to achieve optimum charging performance and maintain peak efficiency at all times. Should a single module develop a minor fault, the charger bypasses the module and keeps running at reduced power to continue the charging process – and your business operations – without interruption.

OPTIMIZED CHARGING

EnForcer IMPAQ+ high frequency modular chargers employ the EnerSys exclusive IONIC[™] charge profile to continuously diagnose battery condition throughout the charging process. This optimizes the charging profiles and can reduce charging times by one to two hours compared to other chargers depending on battery type. The IONIC charge profile effectively brings a battery's specific gravity back to "nameplate" – that is, to virtually the same rating the battery had when new. EnForcer IMPAQ+ chargers automatically identify batteries, assuring increased efficiency and power factor control for exceptional, customized charging.

FLEXIBLE DESIGN AND SIMPLIFIED SERVICE SOLUTION

The modular charger concept adapts to a wide range of battery capacities, allowing potential reduction of the number of chargers in your fleet. Fewer chargers means more space. Plus, the self-diagnostics feature flags any possible failures and replacing modules is easy to do.

REDUCED ENERGY FOOTPRINT

EnForcer[®] IMPAQ[™] and IMPAQ+ modular chargers:

- Provide energy savings with efficiency up to 94%
- Reduce electrical infrastructure requirements with 99% power factor
- Consume below 10W in stand-by mode
- Comply with the latest global standards including the California Energy Commission (CEC) appliance efficiency standards



IMPAQ[™] Chargers (Plug-in, 2, 3, 4, 6 and 8 bay and 8 bay dual-port)

Charging	Flexibility	Communication	Construction	Single Phase	Three Phase	
<ul style="list-style-type: none"> • Flooded • Opportunity • Cold store • VRLA • Gel-bloc • De-sulphation charge • Auto equalization charge 	<ul style="list-style-type: none"> • Multiple charging profiles • Extended programmable capacity range • Future-proofing extendable output power • Charge block-out settings 	<ul style="list-style-type: none"> • USB to download and upload charger data 	<ul style="list-style-type: none"> • Free-standing or wall-mounted • LCD screen with customer programmable menu • Light and modern design 	Plug-in, 3 and 6 bay <ul style="list-style-type: none"> • VAC: 120, 208, 220, 240 • Charger range: 12V, 24V and 36/48V 	2/4 bay <ul style="list-style-type: none"> • VAC: 480 • Charger range: 24V and 36/48V 	2, 4, 6, 8 bay and 8 bay dual-port <ul style="list-style-type: none"> • VAC: 208, 220, 240, 480, 600 • Charger range: 24/36/48V and 72/80V

EnForcer[®] IMPAQ[™]



IMPAQ+[™] Chargers (2, 3, 4, 6 and 8 bay and 8 bay dual-port)

Charging	Flexibility	Communication	Construction	Single Phase	Three Phase	
<ul style="list-style-type: none"> • Proprietary IONIC[™] profile with auto-diagnostics • Opportunity • Cold store • VRLA • Gel-bloc • De-sulphation charge • Auto equalization charge • Automatic temperature adjustment with Wi-iQ[®] battery device 	<ul style="list-style-type: none"> • Multiple charging profiles • IONIC profile automatically adjusts to multiple DC voltages and battery capacities • Future-proofing extendable output power • Charge block-out settings 	<ul style="list-style-type: none"> • Wireless communication between charger and battery via Wi-iQ[®] battery device • USB to download and upload charger data • Ethernet connection 	<ul style="list-style-type: none"> • Free-standing or wall-mounted • 4.3" multi-color dashboard screen with customer programmable menu • Display color changes to indicate charge condition • Light and modern design 	3 and 6 bay <ul style="list-style-type: none"> • VAC: 120, 208, 220, 240 • Charger range: 12V, 24V and 36/48V 	2/4 bay <ul style="list-style-type: none"> • VAC: 480 • Charger range: 24V and 36/48V 	2, 4, 6, 8 bay and 8 bay dual-port <ul style="list-style-type: none"> • VAC: 208, 220, 240, 480, 600 • Charger range: 24/36/48V and 72/80V

EnForcer[®] IMPAQ+[™]



EnForcer® IMPAQ™ Modular Charger Overview

For a complete listing of all available models and power levels, please refer to the corresponding owner's manual.

	Output DC Voltage	Cabinet Size	Cabinet Code	Max Battery Capacity (Standard 8 hr)	AH Battery Capacity (Opportunity Mode ¹)	Input AC Amps	VAC	Max Weight (LBS)	Dimensions (W x D x H)
Single Phase Plug-In	12	1	AK	220 (430 ²)	140	5	120	6	5.83" x 3.80" x 10.41"
	24	1	AK	125 (250 ²)	80	6	120	6	5.83" x 3.80" x 10.41"
	36/48	1	AK	88/70 (175/135 ²)	56/44	6	120	6	5.83" x 3.80" x 10.41"
Single Phase	12	3	CM	660 (1315 ²)	420	14	120	17	9.84" x 7.22" x 13.54"
	24	3	CM	375 (750 ²)	240	16	120	17	9.84" x 7.22" x 13.54"
	36/48	3	CM	265/210 (525/420 ²)	168/132	18	120	17	9.84" x 7.22" x 13.54"
	12	3	CM	660	420	8.4/7.8/7.2	208/220/240	17	9.84" x 7.22" x 13.54"
	24	3	CM	660	420	16.2/15.4/14.1	208/220/240	17	9.84" x 7.22" x 13.54"
	36/48	3	CM	450/340	300/216	17.4/16.8/15.0	208/220/240	17	9.84" x 7.22" x 13.54"
	12	6	FP	1320	840	29	120	48	20.47" x 10.24" x 16.34"
	24	6	FP	750	480	33	120	48	20.47" x 10.24" x 16.34"
	36/48	6	FP	525/420	340/260	36	120	48	20.47" x 10.24" x 16.34"
	12	6	FP	1320	840	16.8/15.6/14.4	208/220/240	48	20.47" x 10.24" x 16.34"
	24	6	FP	1320	840	32.4/30.6/28.2	208/220/240	48	20.47" x 10.24" x 16.34"
	36/48	6	FP	900/680	600/432	34.8/33.6/30.0	208/220/240	48	20.47" x 10.24" x 16.34"
	24	2	HL	1000	640	11.6	480	67	13.18" x 13.80" x 19.50"
	36/48	2	HL	625/625	400/400	14.2	480	67	13.18" x 13.80" x 19.50"
	24	4	JN	2000	1280	23.2	480	84	13.18" x 13.80" x 19.50"
36/48	4	JN	1250/1250	800/800	28.4	480	84	13.18" x 13.80" x 19.50"	
Three Phase	24/36/48	4	JN	1000/1000/1000	640/640/640	29.6/28.0/25.6	208/220/240	84	13.18" x 13.80" x 19.50"
	72/80	4	JN	625/625	400/400	30.8/29.2/26.8	208/220/240	84	13.18" x 13.80" x 19.50"
	24/36/48	4	JN	2000/2000/1500	1280/1280/960	19.2	480	84	13.18" x 13.80" x 19.50"
	72/80	4	JN	1000/900	640/576	19.2	480	84	13.18" x 13.80" x 19.50"
	24/36/48	4	JN	2000/2000/1500	1280/1280/960	15.6	600	84	13.18" x 13.80" x 19.50"
	72/80	4	JN	1000/900	640/576	15.6	600	84	13.18" x 13.80" x 19.50"
	24/36/48	6	LP	1500/1500/1500	960/960/960	44.4/42.0/38.4	208/220/240	106	19.10" x 13.80" x 19.50"
	72/80	6	LP	940/940	600/600	46.2/43.8/40.2	208/220/240	106	19.10" x 13.80" x 19.50"
	24/36/48	6	LP	2000/2000/2000	1280/1280/1280	28.8	480	106	19.10" x 13.80" x 19.50"
	72/80	6	LP	1500/1350	960/864	28.8	480	106	19.10" x 13.80" x 19.50"
	24/36/48	6	LP	2000/2000/2000	1280/1280/1280	23.4	600	106	19.10" x 13.80" x 19.50"
	72/80	6	LP	1500/1350	960/864	23.4	600	106	19.10" x 13.80" x 19.50"
	24/36/48	8	NR	2000/2000/2000	1280/1280/1280	59.2/56/51.2	208/220/240	197	15.95" x 14.80" x 37.80"
	72/80	8	NR	1250/1250	800/800	61.6/58.4/53.6	208/220/240	197	15.95" x 14.80" x 37.80"
	72/80	8	NR	2000/1800	1280/1152	38.4	480	197	15.95" x 14.80" x 37.80"
72/80	8	NR	2000/1800	1280/1152	31.2	600	197	15.95" x 14.80" x 37.80"	
Three Phase Dual Port	24/36/48	(2) 4	JJR	1000/1000/1000	640/640/640	59.2/56/51.2	208/220/240	203	15.95" x 14.80" x 37.80"
	72/80	(2) 4	JJR	625/625	400/400	61.6/58.4/53.6	208/220/240	203	15.95" x 14.80" x 37.80"
	24/36/48	(2) 4	JJR	2000/2000/1500	1280/1280/960	38.4	480	203	15.95" x 14.80" x 37.80"
	72/80	(2) 4	JJR	1000/900	640/576	38.4	480	203	15.95" x 14.80" x 37.80"
	24/36/48	(2) 4	JJR	2000/2000/1500	1280/1280/960	31.2	600	203	15.95" x 14.80" x 37.80"
72/80	(2) 4	JJR	1000/900	640/576	31.2	600	203	15.95" x 14.80" x 37.80"	

¹ - AH Battery Capacity (Opportunity Mode) based on 25% maximum charge rate. Larger battery capacities can be charged in opportunity mode, but cannot exceed the max battery capacity indicated in the "Max Battery Capacity (Standard 8 hr)" column.
² - Based on 13 hour recharge, which only applies to flooded profile. Cold storage and VRLA profile must use 8 hour rate.



ENERSYS WORLD HEADQUARTERS
 2366 Bernville Road
 Reading, PA 19605
 +1-800-EnerSys
 Fax: +1-610-372-8613

ENERSYS CANADA INC.
 61 Parr Boulevard Unit 3
 Bolton, Ontario • Canada L7E 4E3
 +1-800-363-4877
 Fax: +1-905-951-4441

ENERSYS DE MEXICO
 Ave Lopez Mateos #4210
 Colonia Casa Blanca • C.P. 66475
 San Nicolas de los Garza, N.L. Mexico
 +52-818-329-6400
 Fax: +52-818-329-6489

www.enersys.com

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