



Design Envelope

**Design Envelope
(Permanent Magnet)
6800 G Booster**

Parts list

File No: 6062.111

Date: JUNE 14, 2024

Supersedes: 6062.111

Date: JUNE 01, 2022



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INTRODUCTION

Armstrong was founded on the core values of Community, Service, Learning and Innovation. Reflecting our commitment to service, Armstrong now provides 360 Service and Support. Working collaboratively with the 'partner' companies in our network, we're ready to provide the service and support that customers need in relation to building performance.

A key part of serving our customers is providing Genuine Armstrong Replacement Parts to support installations of our products. But the value we provide goes beyond the quality of the replacement part.

With the availability of parts in packaged kits, you'll never have to leave a repair incomplete just because you didn't have all the pieces required for the job. And you won't have to pay a premium for rush delivery of additional parts.

Your customers will be happier, because their mechanical systems will be returned to service earlier. That means you'll be more likely to get their repeat business.

The Armstrong replacement parts program serves contractors and end customers through a combination of: Availability, Easy Selection, Easy Transactions, Quick Delivery and Technical Support.

AVAILABILITY

- Dedicated service parts inventory
- Real-time inventory information
- Active channel inventory management

EASY SELECTION

- Parts selection charts with updated descriptions, pictures and sizing details
- Illustrated part selection information
- All items within each Parts Kit are carefully selected for accurate sizing

EASE OF TRANSACTION

- Parts and Kits available in [ADEPT](#) Locator tool for local parts dealers
- Complete parts kits reduce the work to source items.
- One search and one order address a service issue

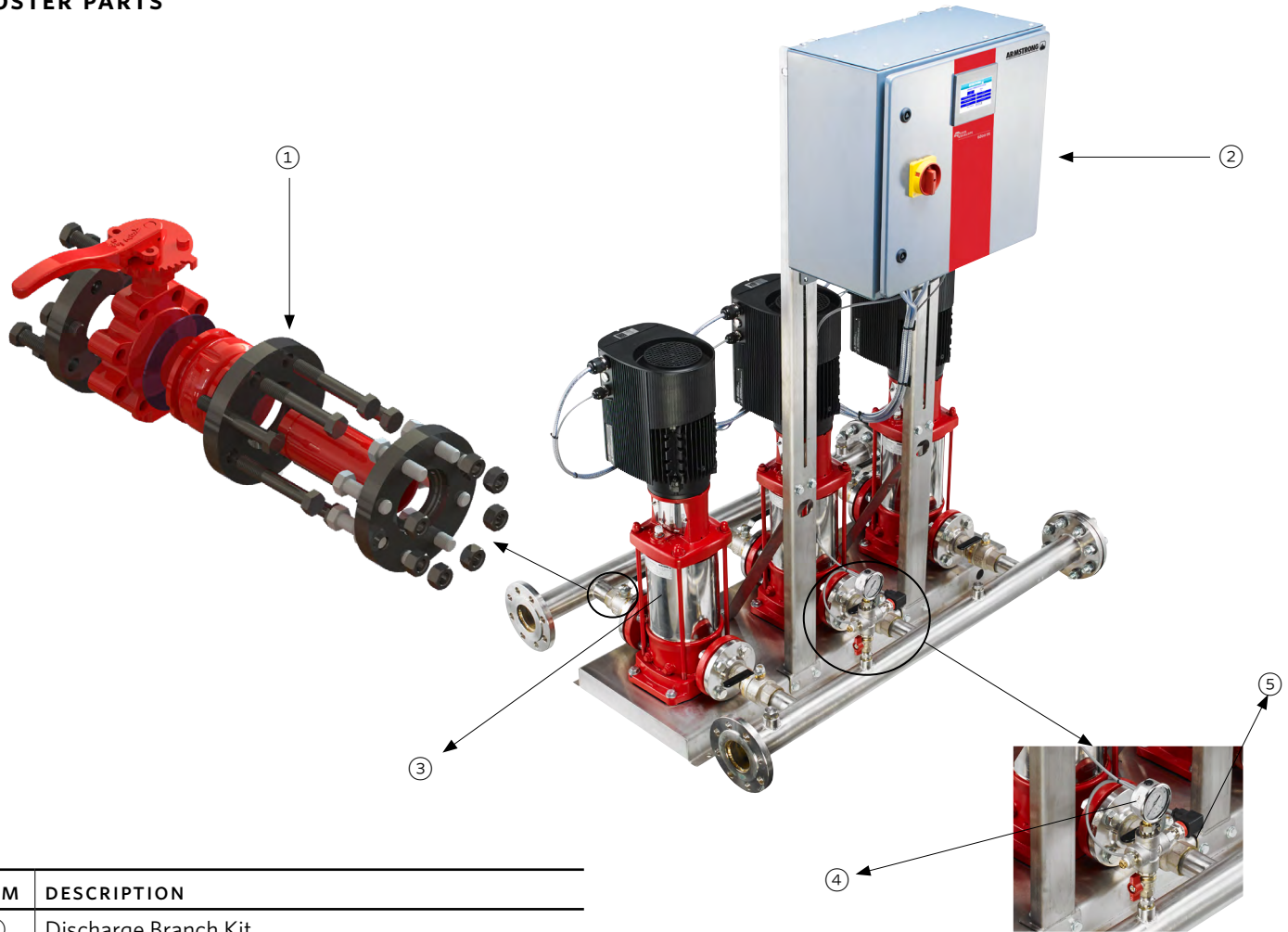
QUICK DELIVERY OF PARTS SOLUTIONS

- On-time shipment
- Options for shipping service levels
- Parts Kits include all parts and related items required to complete replacement work

SUPPORT

- Trained Armstrong support professionals
- Dedicated 24x7 service and support parts

BOOSTER PARTS



ITEM	DESCRIPTION
①	Discharge Branch Kit
②	Controller
③	4700 VMS Pump
④	Gauge
⑤	Transducer

NOTE:

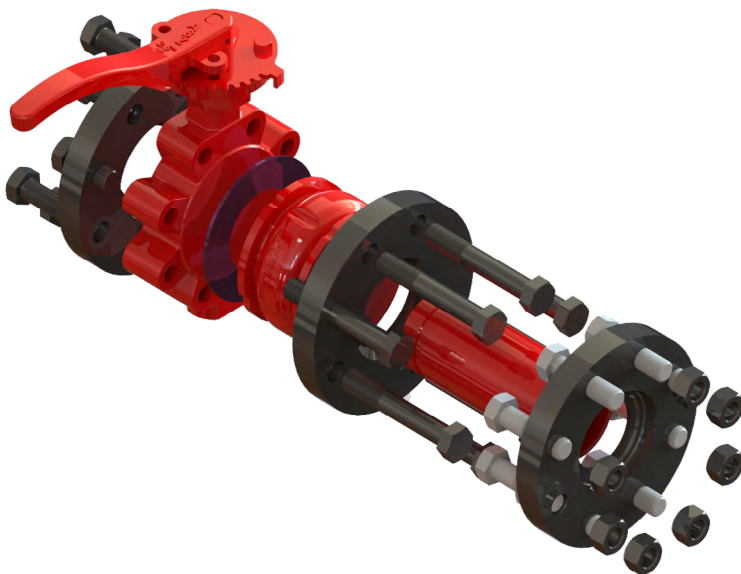
Parts and Quantity may vary per Booster. for more information, please consult Armstrong before ordering parts

4700 VMS PUMP PARTS & KITS



NOTE:
For 4700 VMS Pump part kits refer **FILE NO: 6047.110**

DISCHARGE BRANCH KIT*



KIT INCLUDES

Flange adapter

Check valve

Butterfly valve

Spool

Coupling

Gasket/ring

Studs & Nuts /Bolts **

NOTE:

- * Discharge FTV Branch Retrofit Kit for Installed Booster and Discharge Branch Kit for New Booster
- ** For 2" - Studs & Nuts
For All others - Bolts
- *** Existing Flange adaptor and rigidlok coupler are re-used when replacing a 2" FTV on a booster

SI NO	KIT PART#	PUMP CONNECTION SIZE	PUMP SIZE	DESIGN ENVELOPE MODEL NUMBERS							
1	86800-NSFBRNCH-23K	2" ANSI 300	VMS 10:02B VMS 10:03B VMS 10:04BE VMS 10:05B VMS 10:06B VMS 10:09B VMS 10:10B VMS 10:10B VMS 10:12B VMS 10:16B VMS 15:01B VMS 15:02B VMS 15:03BE VMS 15:04BE VMS 15:05B VMS 15:07B VMS 15:10B VMS 15:12B VMS 20:01B VMS 20:02B VMS 20:03B VMS 10:02B	N230202	N330402	N431202	N130502S				
				N230302	N330602	N431602	N130602S				
				N230502	N330902	N480102	N130902S				
				N230602	N331002	N480302	N131202S				
				N230902	N331202	N480402	N131602S				
				N231002	N331602	N480502	N180102S				
				N231202	N380102	N480702	N180202S				
				N231602	N380202	N481002	N180302S				
				N280102	N380302	N490102	N180402S				
				N280202	N380402	N490202	N180502S				
				N280302	N380502	N490302	N180702S				
				N280402	N380702	N580302	N181002S				
				N280502	N381002	N580402	N181202S				
				N280702	N381202	N580502	N190102S				
				N281002	N390102	N580702	N190202S				
				N281202	N390202	N581002	N190302S				
				N290102	N390302	N590102	N230202S				
				N290202	N430202	N590202	N230402S				
				N290302	N430402	N130202S	N230602S				
				N330202	N430602	N130302S	N230902S				
				N330302	N430902	N130402S	N231002S				
				N231202S	N231602S	N280102S	N280202S				
				2	86800-NSFBRNCH-25K	2.5" ANSI 150	VMS 32:01 VMS 32:02-2 VMS 32:03-2 VMS 32:04-3	N250102	N450102	N150222S	N350222S
								N250222	N450222	N150322S	N350322S
N250322	N450322	N150432S	N350432S								
N250432	N450432	N250102S	N450222S								
N350102	N550222	N250222S	N450322S								
N350222	N550322	N250322S	N450432S								
N350322	N550432	N250432S									
N350432	N150102S	N350102S									
3	86800-NSFBRNCH-27K	2.5" ANSI 300	VMS 32:05 VMS 32:06 VMS 32:08-3 VMS 32:10-1	N250502	N450602	N151012S	N450502				
				N250602	N450832	N250502S	N150832S				
				N250832	N550502	N250602S	N350832S				
				N251012	N550602	N250832S	N450602S				
				N350502	N550832	N350502S	N450832S				
				N350602	N150502S	N350602S					
				N350832	N150602S	N450502S					

PARTS LIST

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SI NO	KIT PART#	PUMP CONNECTION SIZE	PUMP SIZE	DESIGN ENVELOPE MODEL NUMBERS			
4	86800-NSFBRNCH-29K	3" ANSI 150	VMS 45:01E VMS 45:02-1 VMS 45:03 VMS 45:03-2	N260102	N460102	N160102S	N360102S
				N260212	N460212	N160212S	N360212S
				N260302	N460302	N160302S	N360302S
				N260322	N460322	N160322S	N360322S
				N360102	N560102	N260102S	N460102S
				N360212	N560212	N260212S	N460212S
				N360302	N560302	N260302S	N460302S
				N360322	N560322	N260322S	N460322S
5	86800-NSFBRNCH-31K	3" ANSI 300	VMS 45:04-1 VMS 45:05 VMS 45:07-2	N260412	N460722	N260502S	N460412
				N260502	N560412	N260722S	N460502
				N260722	N560502	N360412S	N160722S
				N360412	N560722	N360502S	N260412S
				N360502	N160412S	N360722S	N460502S
6	86800-NSFBRNCH-33K	4" ANSI 150	VMS 64:01E VMS 64:02 VMS 64:02-1 VMS 64:03-2 VMS 64:2-1 VMS 64:3-2	N270102	N470102	N170212S	N370322
				N270202	N470212	N170322S	N170202S
				N270212	N470322	N270102S	N370212S
				N270322	N570102	N270202S	N370322S
				N370102	N570212	N270212S	N470102S
				N370202	N570322	N270322S	N470212S
				N370212	N170102S	N370102S	N470322S
7	86800-NSFBRNCH-35K	4" ANSI 300	VMS 64:04 VMS 64:04-2	N270402	N470422	N170422S	N470422S
				N270422	N570422	N270422S	
				N370422	N170402S	N370422S	

SUCTION ISOLATION VALVE (BFV)



SI NO	KIT PART#	KIT DESCRIPTION	SIZE	PUMP SIZE	CLASS	DESIGN ENVELOPE MODEL NUMBERS					
1	83500500-180	VALVE BFLY 2" 7700 GRVD LEVER	2"	VMS10:02B	300#	PM230202	PM330202	PM430602	PM130302S	PM230902S	PM380102S
				VMS10:03B		PM230202	PM330302	PM430902	PM130402S	PM231002S	PM380302S
				VMS10:04BE		PM230302	PM330402	PM431202	PM130502S	PM231202S	PM380402S
				VMS10:05B		PM230402	PM330602	N431602	PM130602S	N231602S	PM380502S
				VMS10:06B		PM230502	PM330902	PM480102	PM130902S	PM280102S	N380702S
				VMS10:09B		PM230602	PM331002	PM480302	PM131202S	PM280202S	N381002S
				VMS 10:10B		PM230902	PM331202	PM480402	N131602S	PM280302S	PM390102S
				VMS10:10B		PM231002	N331602	PM480502	PM180102S	PM280402S	PM390202S
				VMS 10:12B		PM231202	PM380102	N480702	PM180202S	PM280502S	PM390302S
				VMS 10:16B		N231602	PM380202	N481002	PM180302S	N280702S	PM480302S
				VMS 15:01B		PM280102	PM380302	PM490102	PM180402S	N281002S	PM480402S
				VMS 15:02B		PM280202	PM380402	PM490202	PM180502S	N281202S	PM480502S
				VMS 15:03BE		PM280302	PM380502	PM490302	N180702S	PM290102S	N480702S
				VMS 15:04BE		PM280402	N380702	PM580302	N181002S	PM290202S	N481002S
				VMS 15:05B		PM280502	N381002	PM580402	N181202S	PM290302S	PM490102S
				VMS 15:07B		N280702	N381202	PM580502	PM190102S	PM330202S	PM490202S
				VMS 15:10B		N281002	PM390102	N580702	PM190202S	PM330402S	
				VMS 15:12B		N281202	PM390202	N581002	PM190302S	PM330602S	
				VMS 20:01B		PM290102	PM390302	PM590102	PM230202S	PM331002S	
				VMS 20:02B		PM290202	PM430202	PM590202	PM230402S	PM331202S	
VMS 20:03B	PM290302	PM430402	PM130202S	PM230602S	N331602S						
2	83500500-181	VALVE BFLY 2.5" 7700 GRVD LEVR	2.5"	VMS 32:01	150#/ 300#	N250102	N251012	N450102	N550322	N150432S	N250432S
				VMS 32:02-2		N250102	N350102	N450222	N550432	N150502S	N250502S
				VMS 32:03-2		N250222	N350222	N450322	N550502	N150602S	N250602S
				VMS 32:04-3		N250322	N350322	N450432	N550602	N150832S	N250832S
				VMS 32:05		N250432	N350432	N450502	N550832	N151012S	N350102S
				VMS 32:06		N250502	N350502	N450602	N150102S	N250102S	N350222S
				VMS 32:08-3		N250602	N350602	N450832	N150222S	N250222S	N350322S
				VMS 32:10-1		N250832	N350832	N550222	N150322S	N250322S	N350432S
						N350502S	N350602S	N350832S	N450222S	N450322S	N450432S
						N450502S	N450602S	N450832S			

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SI NO	KIT PART#	KIT DESCRIPTION	SIZE	PUMP SIZE	CLASS	DESIGN ENVELOPE MODEL NUMBERS					
3	83500500-182	VALVE BFLY 3" 7700 GRVD LEVR	3"	VMS 45:01E	150#/ 300#	N260102	N460102	N160212S	N360302S		
				VMS 45:01E		N260212	N460212	N160302S	N360322S		
				VMS 45:01E		N260302	N460302	N160322S	N360412S		
				VMS 45:01E		N260322	N460322	N160412S	N360722S		
				VMS 45:01E		N260412	N460412	N160502S	N460102S		
				VMS 45:01E		N260502	N460502	N160722S	N460212S		
				VMS 45:01E		N260722	N460722	N260102S	N460302S		
				VMS 45:01E		N360502S	N560102	N260212S	N460322S		
				VMS 45:02-1		N360102	N560212	N260302S	N460412S		
				VMS 45:03		N360212	N560302	N260322S	N460502S		
				VMS 45:03-2		N360302	N560322	N260412S	N460722S		
				VMS 45:04-1		N360322	N560412	N260502S			
				VMS 45:05		N360412	N560502	N260722S			
				VMS 45:07-2		N360502	N560722	N360102S			
				VMS 45:01E		N360722	N160102S	N360212S			
4	83500500-183	VALVE BFLY 4" 7700 GRVD LEVER	4"	VMS 64:01E	150#/ 300#	N270102	N370202	N570102	N170402S	N370212S	
				VMS 64:02		N270202	N370212	N570212	N170422S	N370322S	
				VMS 64:02-1		N270212	N370322	N570322	N270102S	N370422S	
				VMS 64:03-2		N270322	N370422	N570422	N270202S	N470102S	
				VMS 64:04		N270402	N470102	N170102S	N270212S	N470212S	
				VMS 64:04-2		N270422	N470212	N170202S	N270322S	N470322S	
				VMS 64:2-1		N370102	N470322	N170212S	N270422S	N470422S	
				VMS 64:3-2		N470422	N170322S	N370102S			

SUCTION TRANSDUCER

SI NO	PART NUMBER	DESCRIPTION	SUCTION PRESSURE
1	8D500400-202	Transducer pres 300PSIG 4-20mA	Up to 275 psi

DISCHARGE TRANSDUCER

SI NO	PART NUMBER	DESCRIPTION	OPERATING PRESSURE RANGES
1	8D500400-202	Transducer pres 300PSIG 4-20mA	Up to 275 psi
2	8D500400-203	Transducer pres 500PSIG 4-20mA	Above 275 psi



SUCTION GAUGE

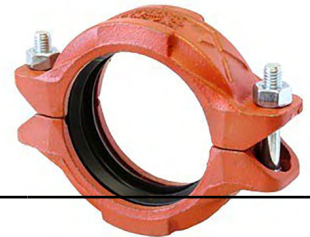
SI NO	PART NUMBER	DESCRIPTION	SUCTION PRESSURE
1	8975005-811	Gauge 0-160 psi ¼"BM 2.5"	0-160 psi



DISCHARGE GAUGE

SI NO	PART NUMBER	DESCRIPTION	OPERATING PRESSURE RANGE
1	8975005-811	Gauge 0-160 psi ¼"BM 2.5"	up to 125 psi
2	8975005-812	Gauge 0-300 psi ¼"BM 2.5"	125 to 225 psi
3	8975005-813	Gauge 0-400 psi ¼"BM 2.5"	>=275 psi

HEADER COUPLING (RIGID LOCK)



SI NO	KIT PART#	KIT DESCRIPTION	SIZE	DESIGN ENVELOPE MODEL NUMBERS				
1	8425900-302	Rigidlok coupling 3", 7401	3"	PM230202	N280702	PM380102	PM130502S	PM190202S
				PM230302	N281002	PM380202	PM130602S	PM190302S
				PM230402	N281202	PM380302	PM130902S	PM230202S
				PM230502	PM290102	PM380402	PM131202S	PM230402S
				PM230602	PM290202	PM380502	N131602S	PM230602S
				PM230902	PM290302	N380702	PM180102S	PM230902S
				PM231002	PM330202	N381002	PM180202S	PM231002S
				PM231202	PM330302	N381202	PM180302S	PM231202S
				N231602	PM330402	PM390102	PM180402S	N231602S
				PM280102	PM330602	PM390202	PM180502S	PM280102S
				PM280202	PM330902	PM390302	N180702S	PM280202S
				PM280302	PM331002	PM130202S	N181002S	PM280302S
				PM280402	PM331202	PM130302S	N181202S	PM280402S
				PM280502	N331602	PM130402S	PM190102S	PM280502S
				N280702S	N281202S	PM290202S	PM330202S	PM330602S
				N281002S	PM290102S	PM290302S	PM330402S	PM331002S
				PM331202S	PM380102S	PM380402S	N380702S	PM390102S
				N331602S	PM380302S	PM380502S	N381002S	PM390202S
								PM390302S

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SI NO	KIT PART#	KIT DESCRIPTION	SIZE	DESIGN ENVELOPE MODEL NUMBERS				
2	8425900-304	Rigidlok coupling 4", 7401	4"	N250102	N250832	N350602	N431602	PM490102
				N250102	N251012	N350832	PM480102	PM490202
				N250222	N350102	PM430202	PM480302	PM490302
				N250322	N350222	PM430402	PM480402	N150102S
				N250432	N350322	PM430602	PM480502	N150222S
				N250502	N350432	PM430902	N480702	N150322S
				N250602	N350502	PM431202	N481002	N150432S
				N150502S	N250222S	N250832S	N480702S	N250102S
				N150602S	N250322S	PM480302S	N481002S	N250602S
				N150832S	N250432S	PM480402S	PM490102S	
				N151012S	N250502S	PM480502S	PM490202S	
3	8425900-306	Rigidlok coupling 6", 7401	6"	N260102	N360322	N550832	N170202S	N350502S
				N260212	N360412	PM580302	N170212S	N350602S
				N260302	N360502	PM580402	N170322S	N350832S
				N260322	N360722	PM580502	N170402S	N360102S
				N260412	N450102	N580702	N170422S	N360212S
				N260502	N450222	N581002	N260102S	N360302S
				N260722	N450322	PM590102	N260212S	N360322S
				N270102	N450432	PM590202	N260302S	N360412S
				N270202	N450502	N160102S	N260322S	N360502S
				N270212	N450602	N160212S	N260412S	N360722S
				N270322	N450832	N160302S	N260502S	N450222S
				N270402	N550222	N160322S	N260722S	N450322S
				N270422	N550322	N160412S	N350102S	N450432S
				N360102	N550432	N160502S	N350222S	N450502S
				N360212	N550502	N160722S	N350322S	N450602S
N360302	N550602	N170102S	N350432S	N450832S				
4	8425900-307	Rigidlok coupling 8", 7401	8"	N370102	N460412	N560302	N270422S	N460412S
				N370202	N460502	N560322	N370102S	N460502S
				N370212	N460722	N560412	N370212S	N460722S
				N370322	N470102	N560502	N370322S	N470102S
				N370422	N470212	N560722	N370422S	N470212S
				N460102	N470322	N270102S	N460102S	N470322S
				N460212	N470422	N270202S	N460212S	N470422S
				N460302	N560102	N270212S	N460302S	
N460322	N560212	N270322S	N460322S					
5	8425900-308	Rigidlok coupling 10", 7401	10"	N570102	N570212	N570322	N570422	

CONTROLLER PANEL PARTS

POWER SUPPLY

PART#	DESCRIPTION
9955012-100	Power supply 1ph 85-264V AC, 24V DC/2,5A
84500251-401*	Power supply 320-575V/24V DC



NOTE:

* Legacy Booster 3 phase power supply

DISCONNECT SWITCH

PART#	DESCRIPTION
9955012-101	Non-fused disconnect 30A
9955012-102	Non-fused disconnect 60A
9955012-103	Non-fused disconnect 100A
9955012-141	30A fused disconnect
9955012-142	60A fused disconnect

DISCONNECT



FUSED DISCONNECT



HANDLE



PART#	DESCRIPTION
9955012-104	30 - 100A lockable handle



PART#	DESCRIPTION
9955012-105	200 - 400A lockable handle



PART#	DESCRIPTION
9955012-139	Locking handle with 2 keys



PART#	DESCRIPTION
9955012-140	Handle 30 - 60A fusible disc

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CONTROLLER FUSE

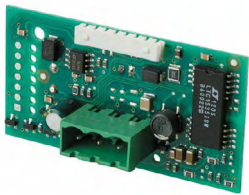


PART#	DESCRIPTION
9955012-106	4A FUSE FNQ-R-4
9955012-107	6A FUSE FNQ-R-6
9955012-108	10A FUSE FNQ-R-10
9955012-109	15A FUSE FNQ-R-15
9955012-110	20A FUSE FNQ-R-20
9955012-111	25A FUSE FNQ-R-25
9955012-112	30A FUSE FNQ-R-30

PART#	DESCRIPTION
9955012-113	35A FUSE JKS-35
9955012-114	40A FUSE JKS-40
9955012-115	45A FUSE JKS-45
9955012-116	50A FUSE JKS-50
9955012-117	60A FUSE JKS-60
9955012-118	80A FUSE JKS-80
9955012-119	100A FUSE JKS-100
9955012-120	125A FUSE JKS-125
9955012-121	150A FUSE JKS-150
9955012-122	200A FUSE JKS-200

CONTROL MODULES

PARTS WITHOUT PROGRAM



PART#	DESCRIPTION
9955012-123	MODBUS RTU PCOS004850 RS485-without program

PART#	DESCRIPTION
9955012-124	Lonworks serial card for pCO without program

PART#	DESCRIPTION
9955012-125	BACNET MS/TP pCO Net Card -without program

PART#	DESCRIPTION
9955012-126	BACNET I/P pCO Net Card - without program

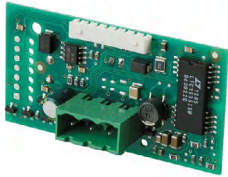


NOTE:

Use Configurator tool for Controls Replacement Parts- DE Booster for Modbus, BACnet and Lon works to capture the serial number & programming

CONTROL MODULES

PARTS PROGRAM



PART#	DESCRIPTION
89955012-123	MODBUS RTU card programmed

PART#	DESCRIPTION
89955012-125	BACNET MS/TP card programmed

PART#	DESCRIPTION
89955012-126	BACNET I/P card programmed

PROGRAMMABLE LOGIC CONTROLLER (PLC)



PART#	DESCRIPTION
89955012-135	PLC



PART#	DESCRIPTION
89955012-124	Lonworks serial card programmed



HMI TOUCH SCREEN



PART#	DESCRIPTION
89955012-132*	Schneider HMI, 2015-2018 -with program (serial number required)
89955012-133	Maple 4.3" HMI, 2018 onwards with program (serial number required)
89955012-148**	Maple 7" HMI, 2015 onwards with program (serial number required)
89955012-135	PLC PC05+ DE 6800 G booster, 2014 onwards -with program (serial number required)

NOTE:

For replacement, provide serial number necessary to match program to site specification.

Each module has unique address, need to be pre-configured with correct firmware/configuration, label/tag the module #, before shipping.

Use Configurator tool for Controls Replacement Parts- DE Booster for PLC, HMI, Modbus, BACnet and Lon works to capture the serial number & programming.

*Obsoleted no more available, use Maple 4.3" HMI until next design available

** 89955012-134 is replaced with new part# 89955012-148

TRANSFORMER



PART#	DESCRIPTION
9955012-136	208, 230 & 460V transformer
9955012-137	575V transformer
9955012-138	380 - 416V transformer

Image may be a representation. See specification for details.

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SURGE ARRESTOR



PART#	DESCRIPTION
9955012-127	208V surge arrestor
9955012-128	230V surge arrestor
9955012-129	460V surge arrestor
9955012-130	575V surge arrestor

SOUNDER/ALARM



PART#	DESCRIPTION
9955012-131	Alarm sounder

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