

- 60 Hz
- Minimum Starting Temperature: -40° C
- Feature CWA Design

**HID CORE & COIL BALLASTS
PULSE START METAL HALIDE**

Input Volts	Catalog* Number	Circuit Type	Watts Input	Max Input Current	Nom Open Circuit Voltage	Fuse Rating	Wir Dia	Dimensions			Capacitor				Total Weight (lbs.)	Ignitor		UL Bench Top Rise		
								Ref Dwg	A	B	µF	Min Volt	Dry Film			Oil Filled			Catalog Number	Max Distance to lamp (ft)
(1) 175 WATT M152 METAL HALIDE PULSE START LAMP																				
277	P175277RCEM	RX-NPF RX-HPF	199	1.50 1.25	277	3	1	RX1	2.3	3.4	12	300	n/a 1.6	n/a 2.8	n/a 1.31x2.16	n/a 3.9	3.9	MH350-1A	10	C
120 or 277 or 347	P175TRIAC3M	CWA	208	1.84 0.79 0.63	308	2	12	PC1	2.5	3.6	10	400	1.6	2.8	1.31x2.16	3.9	6.8	MH350-1	10	B
120 or 208 or 240 or 277	P175MLTAC3M	CWA	208	2.09 1.26 1.02 0.96	306	3	9	PC1	2.5	3.6	10	400	1.6	2.8	1.31x2.16	3.9	6.8	MH350-1A	10	A
120 or 208 or 240 or 277	P175MLTAC4L	CWA	198	1.70 0.95 0.85 0.75	270	3	9	PC2	1.77	3.3	12.5	330	1.55	2.83	n/a n/a	n/a n/a	8.45	MH350-1A	10	A
120 or 208 or 240 or 277 or 480	P175ML5AC3M	CWA	210	1.80 1.05 0.90 0.80 0.45	295	3	26	PC1	2.6	4.0	10	400	1.6	2.8	2.7	2.7	8.0	MH350-1A	10	B
480	P17548TAC4L	CWA	198	0.40	275	2	11	PC2	1.80	3.5	12.5	330	1.6	2.8	n/a n/a	n/a n/a	9.6	MH350-1A	10	A
(1) 200 WATT M136 METAL HALIDE PULSE START LAMP																				
277	P200277RCEM	RX-HPF	218	0.92	277	4	1	RX1	1.0	2.8	13	280	1.6	3.6	n/a n/a	n/a n/a	4.7	MH350-1A	10	A
120 or 277 or 347	P200TRIAC3M	CWA	240	2.70 1.04 0.87	310	3	12	PC1	2.8	4.0	11	400	1.6	2.8	2.7	3.6	8.0	MH350-1A	10	C
120 or 208 or 240 or 277 or 480	P200ML5AC3M	CWA	233	2.66 1.52 1.31 1.12 0.68	303	3	26	PC1	2.7	4.0	11	400	1.6	2.7	n/a n/a	n/a n/a	8.0	MH350-1A	10	C
480	P20048TAC3M	CWA	232	0.50	305	2	11	PC1	2.8	4.1	11	400	1.6	2.8	1.56x2.69	2.7	8.5	MH350-1	10	C
(1) 250 WATT M153 METAL HALIDE PULSE START LAMP																				
277	P250277RCEM	RX-NPF RX-HPF	278	2.00 1.25	277	5	1	RX1	1.0	2.8	17.5	300	n/a 1.6	n/a 3.7	n/a n/a	n/a n/a	4.8	MH350-1A	10	A
120 or 277 or 347	P250TRIAC4M	CWA	300	2.61 1.28 1.09	292	3	12	PC2	1.4	3.4	14	400	1.6	3.7	2.3	4.0	9.0	MH350-1A	10	A
120 or 208 or 240 or 277	P250MLTAC40	CWA	291	2.40 1.40 1.20 1.05	277	5	9	PC2	1.45	3.10	17	360	1.6	3.7	2.3	3.1	9.0	MH350-1A	10	A
120 or 208 or 240 or 277	P250MLTAC4L	CWA	283	2.50 1.50 1.30 1.10	270	5	9	PC2	2.05	3.65	17	360	1.65	3.82	2.3	3.1	10.9	MH350-1A	15	A
120 or 208 or 240 or 277 or 480	P250ML5AC4M	CWA	285	2.45 1.42 1.22 1.05 0.62	290	5	26	PC2	2.0	3.9	14	400	1.6	3.7	1.56x2.69	3.1	11.3	MH350-1A	10	A
480	P25048TAC4L	CWA	283	0.60	275	2	11	PC2	1.9	3.6	17	360	1.65	3.82	n/a n/a	n/a n/a	10.0	MH350-1A	10	A

See page 5-29 for Reference Drawings and Wiring Diagrams.

HID CORE & COIL BALLASTS

PULSE START METAL HALIDE

- 60 Hz
- Minimum Starting Temperature: -40° C
- CWA and High Power Factor Models Available

**PULSE START
MH
320 WATT**

Input Volts	Catalog* Number	Circuit Type	Watts Input	Max Input Current	Nom Open Circuit Voltage	Fuse Rating	Wir Dia	Dimensions			Capacitor				Total Weight (lbs.)	Ignitor		UL Bench Top Rise		
								Ref Dwg	A	B	µF	Min Volt	Dry Film			Oil Filled			Catalog Number	Max Distance to lamp (ft)
													Dia	Ht		Oval	Ht			
(1) 320 WATT M154 METAL HALIDE PULSE START LAMP																				
277	P320277RCEM	RX-NPF RX-HPF	348	3.05 1.51	277	10 6	1	RX1	1.5	3.3	22.5	280	n/a 1.8	n/a 3.6	n/a n/a	n/a n/a	6.8	MH350-1A	10	A
120 or 277 or 347	P320TRIAC4M	CWA	370	4.50	281	8	12	PC2	2.0	3.7	20.5	400	1.6	3.7	2.9	3.6	11.0	MH350-1A	10	C
120 or 208 or 240 or 277				1.50		3														
120 or 208 or 240 or 277	P320MLTAC40	CWA	364	3.10	275	5	9	PC2	2.0	3.9	21.0	360	1.85	3.82	2.9	3.6	11.0	MH350-1A	10	A
120 or 208 or 240 or 277				1.80 1.55 1.35		5 5 4														
120 or 208 or 240 or 277 or 480	P320ML5AC4M	CWA	370	4.00	280	10	26	PC2	2.0	3.9	20.5	360	1.8	3.7	1.91x2.91	3.6	11.3	MH350-1A	10	D
120 or 208 or 240 or 277 or 480				2.40 2.10 1.85 1.06		7 5 5 3														
120 or 208 or 240 or 277 or 480	P320ML5AN4M	CWA	405	4.00	282	10	26	PC2	2.0	3.86	20.5	360	1.85	3.82	1.75	3.1	11.3	MH350-1A	10	A
120 or 208 or 240 or 277 or 480				2.40 2.10 1.85 1.06		7 5 5 3														
120 or 208 or 240 or 277 or 480	P320ML5AC4L	CWA	363	3.10	275	10	26	PC2	1.88	3.8	21	360	n/a	n/a	2.91	3.13	12.0	MH350-1A	10	A
120 or 208 or 240 or 277 or 480				1.80 1.55 1.35 0.80		7 8 5 3														
120 or 208 or 240 or 277 or 480	P320ML5AN4L	CWA	363	3.10	275	8	26	PC2	1.88	3.8	21	360	1.85	3.82	n/a	n/a	12.0	MH350-1A	10	A
120 or 208 or 240 or 277 or 480				1.80 1.55 1.35 0.80		5 4 3														
480	P32048TAC4L	CWA	364	0.80	280	3	11	PC2	2.0	3.9	21	360	1.85	3.82	n/a	n/a	11.0	MH350-1A	10	A

See page 5-29 for Reference Drawings and Wiring Diagrams.

HID
CORE & COIL

- 60 Hz
- Minimum Starting Temperature: -40° C
- Feature CWA Design

**HID CORE & COIL BALLASTS
PULSE START METAL HALIDE**

Input Volts	Catalog* Number	Circuit Type	Watts Input	Max Input Current	Nom Open Circuit Voltage	Fuse Rating	Wir Dia	Dimensions			Capacitor				Total Weight (lbs.)	Ignitor		UL Bench Top Rise		
								Ref Dwg	A	B	µF	Min Volt	Dry Film			Oil Filled			Catalog Number	Max Distance to lamp (ft)
(1) 350 WATT M131 METAL HALIDE PULSE START LAMP																				
277	P350277RCEM	RX-NPF	377	3.80	277	8	1	RX1	1.5	3.3	22.5	300	—	—	—	—	6.8	MH350-1	10	A
		RX-HPF		2.34											n/a	n/a				
120 or 277 or 347	P350TRIAC4M	CWA	405	2.00	280	5	12	PC2	2.0	4.0	21	400	n/a	n/a	2.9	3.1	11.5	MH350-1A	10	C
													1.50							
120 or 208 or 240 or 277	P350MLTAC4M	CWA	400	2.00	275	6	9	PC2	2.0	3.9	22	360	n/a	n/a	2.7	3.9	11.0	MH350-1A	10	C
													3.40							
120 or 208 or 240 or 277	P350MLTAN4M	CWA	400	2.00	275	6	47	PC2	2.0	3.9	22	360	n/a	n/a	2.7	3.9	11.0	MH350-1A	10	A
													1.70							
120 or 208 or 240 or 277 or 480	P350ML5AC4M	CWA	405	2.16	282	5	26	PC2	2.0	3.9	21	400	n/a	n/a	1.91x2.91	3.1	11.3	MH350-1A	10	D
													1.87							
120 or 208 or 240 or 277 or 480	P350ML5AN4M	CWA	405	2.16	282	5	26	PC2	2.0	3.9	21	400	n/a	n/a	1.91x2.91	3.1	11.3	MH350-1A	10	D
													1.87							
120 or 208 or 240 or 277 or 480	P350ML5AC4L	CWA	397	1.65	275	9	26	PC2	1.88	3.8	22	360	1.85	3.82	2.69	3.9	12.0	MH350-1A	10	B
													1.45							
120 or 208 or 240 or 277 or 480	P350ML5AN4L	CWA	397	1.65	275	5	26	PC2	1.88	3.8	22	360	1.85	3.82	2.69	3.9	12.0	MH350-1A	10	A
													1.45							
480	P35048TAC4L	CWA	397	0.85	280	3	11	PC2	2.00	3.9	22	360	1.85	3.82	2.69	3.9	11.0	MH350-1A	10	C

See page 5-29 for Reference Drawings and Wiring Diagrams.

HID CORE & COIL BALLASTS

PULSE START METAL HALIDE

- 60 Hz
- Minimum Starting Temperature: -40° C
- CWA and High Power Factor Models Available

**PULSE START
MH
400 WATT**

Input Volts	Catalog* Number	Circuit Type	Watts Input	Max Input Current	Nom Open Circuit Voltage	Fuse Rating	Wir Dia	Dimensions			Capacitor				Total Weight (lbs.)	Ignitor		UL Bench Top Rise		
								Ref Dwg	A	B	µF	Min Volt	Dry Film			Oil Filled			Catalog Number	Max Distance to lamp (ft)
(1) 400 WATT M135 METAL HALIDE PULSE START LAMP																				
277	P400277RCEM	RX-NPF RX-HPF	425	3.40 2.50	277	8	1	RX1	1.5	3.3	24	280	n/a 1.8	n/a 3.7	n/a n/a	n/a n/a	6.9	MH350-1A	10	A
120 or 277 or 347	P400TRIAC4M	CWA	457	4.40 2.01 1.52	287	5	12	PC2	2.0	3.8	24	400	1.8	3.6	2.9	3.1	11.0	MH350-1A	10	D
120 or 277 or 347	P400TRIAN4M	CWA	454	4.05 1.95 1.40	285	5	12	PC2	2.0	3.9	24	400	1.8	3.6	2.9	3.1	11.0	MH350-1A	10	D
120 or 208 or 240 or 277	P400MLTAC4M	CWA	454	4.10 2.50 2.00 1.85	285	7 5	9	PC2	2.0	3.9	24	400	1.8	3.6	2.9	3.1	11.2	MH350-1A	10	D
120 or 208 or 240 or 277 or 480	P400ML5AC4M	CWA	457	4.00 2.40 2.10 1.85 1.06	286	5	26	PC2	2.0	3.9	24	400	1.8	3.7	1.91x2.91	3.1	11.3	MH350-1A	10	D
120 or 208 or 240 or 277 or 480	P400ML5AN4M	CWA	455	3.90 2.25 1.95 1.70 0.95	286	5	26	PC2	2.0	3.9	24	400	1.8	3.7	1.91x2.91	3.1	11.3	MH350-1A	10	D
480	P40048TAC4L	CWA	455	1.00	275	3	11	PC2	2.3	4.2	28	330	1.85	3.82	n/a	n/a	12	MH350-1A	10	D
480	P40048TAC4M	CWA	457	1.00	285	3	11	PC2	2.0	3.9	24	400	1.8	3.6	3.7	3.1	11.3	MH350-1A	10	D

See page 5-29 for Reference Drawings and Wiring Diagrams.

HID
CORE & COIL

- 60 Hz
- Minimum Starting Temperature: -40° C
- CWA and High Power Factor Models Available

**HID CORE & COIL BALLASTS
PULSE START METAL HALIDE**

Input Volts	Catalog* Number	Circuit Type	Watts Input	Max Input Current	Nom Open Circuit Voltage	Fuse Rating	Wir Dia	Dimensions			Capacitor				Total Weight (lbs.)	Ignitor		UL Bench Top Rise		
								Ref Dwg	A	B	µF	Min Volt	Dry Film			Oil Filled			Catalog Number	Max Distance to lamp (ft)
(1) 450 WATT M144 METAL HALIDE PULSE START LAMP																				
120 or	P450MLTAC4M	CWA	510	4.40	285	10	9	PC2	2.3	4.0	26.5	400	1.8	4.7	2.9	3.5	11.0	MH350-1A	10	C
208 or				2.60		8														
240 or				2.20		7														
277				1.90		5														
120 or	P450ML5AC4M	CWA	510	4.44	305	10	26	PC2	2.6	4.7	26.5	400	1.8	4.7	1.91x2.91	3.9	12.0	MH350-1	10	D
208 or				2.56		8														
240 or				2.38		7														
277 or				1.92		5														
480				1.22		4														
480	P45048TAC4M	CWA	511	1.40	305	10	11	PC2	2.7	4.7	26.5	400	0.8	4.6	2.9	3.5	12.0	MH350-1A	10	D
(1) 750 WATT M149 METAL HALIDE PULSE START LAMP																				
120 or	P750TRIAC5M	CWA	820	7.05	340	15	12	PC3	2.8	4.6	28	425	n/a	n/a	2.91	3.9	18.0	P750-1B	10	B
277 or				3.05		8														
347				2.45		8														
120 or	P750MLTAC5M	CWA	825	7.10	340	18	9	PC3	2.8	4.8	28	400	n/a	n/a	2.91	3.9	18.0	P750-1B	10	D
208 or				4.10		10														
240 or				3.55		10														
277				3.10		8														
120 or	P750ML5AC5M	CWA	820	6.95	340	18	26	PC3	2.8	4.9	28	400	n/a	n/a	2.9	3.9	19.0	P750-1B	16	C
208 or				4.00		10														
240 or				3.50		10														
277 or				3.00		8														
480				1.75		5														
480	P75048TAC5M	CWA	822	1.80	335	5	11	PC3	2.8	4.8	28	400	n/a	n/a	2.91	3.9	18.0	P750-1B	10	D
(1) 875 WATT M166 METAL HALIDE PULSE START LAMP																				
120 or	P875MLTAC5M	CWA	945	8.50	395	20	9	PC3	2.8	4.5	24	440	n/a	n/a	2.9	3.9	17.5	HPS1000-48	10	D
208 or				5.30		15														
240 or				4.30		10														
277				3.80		10														
120 or	P875ML5AC5M	CWA	950	8.05	395	20	26	PC3	2.8	4.8	24	440	n/a	n/a	2.9	3.9	19.4	HPS1000-4B	10	E
208 or				4.65		12														
240 or				4.05		10														
277 or				3.50		10														
480				2.00		5														
(1) 1000 WATT M141 METAL HALIDE PULSE START LAMP																				
120 or	P1000MLTAC5M	CWA	1080	9.00	420	20	9	PC3	2.9	5.1	24	480	n/a	n/a	2.9	3.9	22.0	HPS1000-4B	20	D
208 or				5.20		15														
240 or				4.50		10														
277				3.90		10														
120 or	P1000ML5AC5M	CWA	1080	8.95	420	20	26	PC3	2.9	5.1	24	480	n/a	n/a	2.9	3.9	22.0	HPS1000-4B	20	G
208 or				5.15		15														
240 or				4.45		10														
277 or				3.85		10														
480				2.25		10														
480	P100048TAC5M	CWA	1080	2.55	410	10	11	PC3	2.8	4.8	24	480	n/a	n/a	2.9	3.9	22.0	HPS1000-4B	15	D

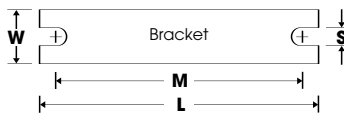
See page 5-29 for Reference Drawings and Wiring Diagrams.

HID CORE & COIL BALLASTS

PULSE START METAL HALIDE

PULSE START
MH

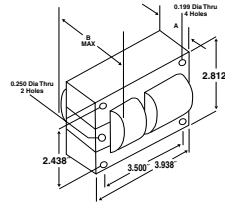
DESCRIPTION	SUFFIX *
For Ballast Only	000
For Bracket Only (see pg. 5-7)	200
For Capacitor Only (see pg. 5-5, 5-6)	500
For Distributor Replacement Kit (see pg. 5-13 thru 5-15)	500K
For Canadian Distributor Replacement Kit (see pg. 5-16)	502K
For Dry-Capacitor & Ballast (see pg. 5-6)	518
For Bracket & Capacitor (see pg. 5-5, 5-7)	700
For Bracket & Dry-Capacitor (see pg. 5-6, 5-7)	718



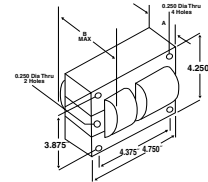
Ref. Dwg.	L	W	M	S
PC1	5.25"	1.25"	4.60"	0.25"
PC2	7.75"	1.25"	5.75"	0.25"
PC3	7.75"	2.75"	6.10"	0.25"
RX1	4.00"	0.75"	3.35"	0.25"

See p. 5-7 for adjustable mounting brackets and detailed bracket drawings.

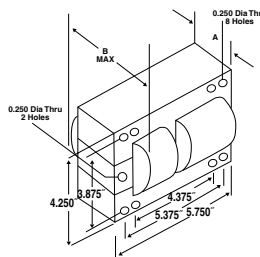
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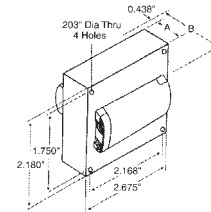
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REFERENCE DRAWING PC3

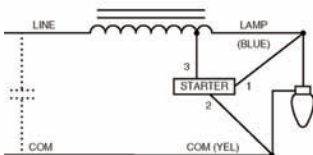


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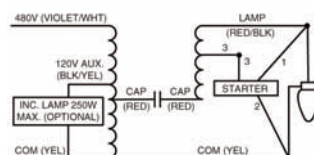


WIRING DIAGRAMS

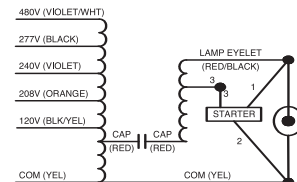
Wiring Diagram 1



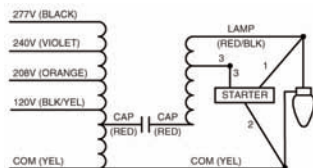
Wiring Diagram 11



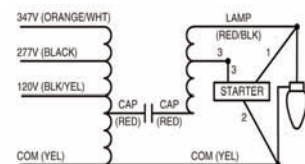
Wiring Diagram 26



Wiring Diagram 9



Wiring Diagram 12



Wiring Diagram 47

