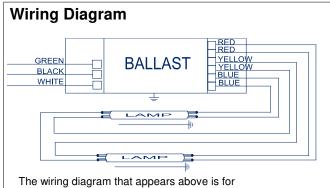


ICN-2S54-90C-T@120				
Brand Name	CENTIUM T5			
Ballast Type	Electronic			
Starting Method	Programmed Start			
Lamp Connection	Series			
Input Voltage	120-277			
Input Frequency	50/60 HZ			
Status	Active			

Lamp Type	Num. of	Rated Lamp Watts	Min. Start Temp (°F/C)	Input Current (Amps)	Input Power (ANSI	Ballast Factor	MAX THD	Power Factor	MAX Lamp Current Crest	B.E.F.
	Lamps				Watts)		%		Factor	
F54T5/HO	1	54	-20/-29	0.53	62	1.04	10	0.98	1.7	1.68
* F54T5/HO	2	54	-20/-29	0.98	118	1.00	10	0.98	1.7	0.85
F54T5/HO/44W	1	44	-20/-29	0.42	50	1.04	10	0.98	1.7	2.08
F54T5/HO/44W	2	44	-20/-29	0.83	98	1.00	10	0.98	1.7	1.02
F54T5/HO/49W	1	49	-20/-29	0.48	57	1.04	10	0.98	1.7	1.82
F54T5/HO/49W	2	49	-20/-29	0.90	107	1.00	10	0.98	1.7	0.93
FC12T5/HO	1	55	-20/-29	0.49	58	0.92	10	0.98	1.7	1.59
FC12T5/HO	2	55	-20/-29	0.92	110	0.88	10	0.98	1.7	0.80
FT36W/2G11	1	36	-20/-29	0.37	44	1.20	10	0.98	1.7	2.73
FT36W/2G11	2	36	-20/-29	0.68	82	1.16	10	0.98	1.7	1.41
FT50W/2G11	1	50	-20/-29	0.50	60	1.11	10	0.98	1.7	1.85
FT50W/2G11	2	50	-20/-29	0.92	111	1.03	10	0.98	1.7	0.93
FT55W/2G11	1	55	-20/-29	0.49	58	0.92	10	0.98	1.7	1.59
FT55W/2G11	2	55	-20/-29	0.90	108	0.90	10	0.98	1.7	0.83



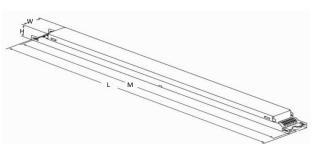
The wiring diagram that appears above is for the lamp type denoted by the asterisk (*)

Standard Lead Length (inches)

	in.	cm.
Black	0	0
White	0	0
Blue	0	0
Red	0	0
Yellow	0	0
Gray		0
Violet		0

	in.	cm.
Yellow/Blue		0
Blue/White		0
Brown		0
Orange		0
Orange/Black		0
Black/White		0
Red/White		0





Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
14.17 "	1.18 "	1.06 "	13.78 "
14 17/100	1 9/50	1 3/50	13 39/50
36 cm	3 cm	2.7 cm	35 cm







Revised 06/03/13



Brand Name CENTIUM T5 Ballast Type Electronic Starting Method Programmed Start Lamp Connection Series Input Voltage 120-277 Input Frequency 50/60 HZ Status Active

Notes:

Section I - Physical Characteristics

- 1.1 Ballast shall be physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable.
- 1.2 Ballast shall be provided with integral leads or poke-in wire trap connectors color-coded per ANSI C82.11.

Section II - Performance

- 2.1 Ballast shall be Programmed Start.
- 2.2 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power.
- 2.3 Ballast shall operate from 50/60 Hz input source of ______ (120V through 277V, 347V or 347V through 480V) with sustained variations of +/- 10% (voltage and frequency).
- 2.4 Ballast shall be high frequency electronic type and operate lamps at a frequency above 42 kHz to avoid interference with infrared devices and eliminate visible flicker.
- 2.5 Ballast shall have a Power Factor greater than 0.98 for primary lamp.
- 2.6 Ballast shall have a minimum ballast factor of 1.0 for primary lamp application.
- 2.7 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less.
- 2.8 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage with primary lamp.
- 2.9 Ballast shall have a Class A sound rating.
- 2.10 Ballast shall have a minimum starting temperature of _____ {-18C (0F) or -29C (-20F)} for primary lamp. Consult lamp manufacturer for temperature versus light output characteristics.
- 2.11 Ballast shall provide Lamp EOL Protection Circuit.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.
- 2.13 Four-lamp ballast shall have (semi-independent or independent) lamp operation.

Section III - Regulatory

- 3.1 Ballast shall not contain any Polychlorinated Biphenyl (PCB).
- 3.2 Ballast shall be Underwriters Laboratories (UL) listed, Class P and Type 1 Outdoor; and Canadian Standards Association (CSA) certified where applicable.
- 3.3 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.4 Ballast shall comply with ANSI C82.11 where applicable.
- 3.5 Ballast shall comply with applicable requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, for Non-Consumer equipment.
- 3.6 Ballast shall comply with UL Type CC rating.
- 3.7 Ballast shall comply with NEMA 410 for in-rush current limits.

Section IV - Other

- 4.1 Ballast shall be manufactured in a factory certified to ISO 9001 Quality System Standards.
- 4.2 Ballast shall carry a five-year warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 70C. Ballasts with a "90C" designation in their catalog number shall also carry a three-year warranty at a maximum case temperature of 90C.
- 4.3 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market.

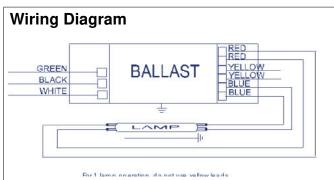


Revised 06/03/13



ICN-2S54-90C-T@120				
Brand Name	CENTIUM T5			
Ballast Type	Electronic			
Starting Method	Programmed Start			
Lamp Connection	Series			
Input Voltage	120-277			
Input Frequency	50/60 HZ			
Status	Active			

Lamp Type	Num. of	Rated Lamp Watts	Min. Start Temp (F/C)	Input Current (Amps)	Input Power (ANSI	Ballast Factor	MAX THD	Power Factor	MAX Lamp Current Crest	B.E.F.
	Lamps				Watts)		%		Factor	
* F54T5/HO	1	54	-20/-29	0.53	62	1.04	10	0.98	1.7	1.68
F54T5/HO	2	54	-20/-29	0.98	118	1.00	10	0.98	1.7	0.85
F54T5/HO/44W	1	44	-20/-29	0.42	50	1.04	10	0.98	1.7	2.08
F54T5/HO/44W	2	44	-20/-29	0.83	98	1.00	10	0.98	1.7	1.02
F54T5/HO/49W	1	49	-20/-29	0.48	57	1.04	10	0.98	1.7	1.82
F54T5/HO/49W	2	49	-20/-29	0.90	107	1.00	10	0.98	1.7	0.93
FC12T5/HO	1	55	-20/-29	0.49	58	0.92	10	0.98	1.7	1.59
FC12T5/HO	2	55	-20/-29	0.92	110	0.88	10	0.98	1.7	0.80
FT36W/2G11	1	36	-20/-29	0.37	44	1.20	10	0.98	1.7	2.73
FT36W/2G11	2	36	-20/-29	0.68	82	1.16	10	0.98	1.7	1.41
FT50W/2G11	1	50	-20/-29	0.50	60	1.11	10	0.98	1.7	1.85
FT50W/2G11	2	50	-20/-29	0.92	111	1.03	10	0.98	1.7	0.93
FT55W/2G11	1	55	-20/-29	0.49	58	0.92	10	0.98	1.7	1.59
FT55W/2G11	2	55	-20/-29	0.90	108	0.90	10	0.98	1.7	0.83



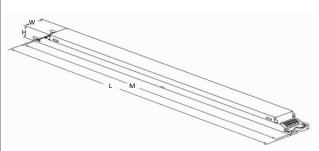
The wiring diagram that appears above is for the lamp type denoted by the asterisk (*)

Standard Lead Length (inches)

	in.	cm.
Black	0	0
White	0	0
Blue	0	0
Red	0	0
Yellow	0	0
Gray		0
Violet		0

	in.	cm.
Yellow/Blue		0
Blue/White		0
Brown		0
Orange		0
Orange/Black		0
Black/White		0
Red/White		0





Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
14.17 "	1.18 "	1.06 "	13.78 "
14 17/100	1 9/50	1 3/50	13 39/50
36 cm	3 cm	2.7 cm	35 cm







Revised 06/03/13



Brand Name CENTIUM T5 Ballast Type Electronic Starting Method Programmed Start Lamp Connection Series Input Voltage 120-277 Input Frequency 50/60 HZ Status Active

Notes:

Section I - Physical Characteristics

- 1.1 Ballast shall be physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable.
- 1.2 Ballast shall be provided with integral leads or poke-in wire trap connectors color-coded per ANSI C82.11.

Section II - Performance

- 2.1 Ballast shall be Programmed Start.
- 2.2 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power.
- 2.3 Ballast shall operate from 50/60 Hz input source of ______ (120V through 277V, 347V or 347V through 480V) with sustained variations of +/- 10% (voltage and frequency).
- 2.4 Ballast shall be high frequency electronic type and operate lamps at a frequency above 42 kHz to avoid interference with infrared devices and eliminate visible flicker.
- 2.5 Ballast shall have a Power Factor greater than 0.98 for primary lamp.
- 2.6 Ballast shall have a minimum ballast factor of 1.0 for primary lamp application.
- 2.7 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less.
- 2.8 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage with primary lamp.
- 2.9 Ballast shall have a Class A sound rating.
- 2.10 Ballast shall have a minimum starting temperature of _____ {-18C (0F) or -29C (-20F)} for primary lamp. Consult lamp manufacturer for temperature versus light output characteristics.
- 2.11 Ballast shall provide Lamp EOL Protection Circuit.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.
- 2.13 Four-lamp ballast shall have (semi-independent or independent) lamp operation.

Section III - Regulatory

- 3.1 Ballast shall not contain any Polychlorinated Biphenyl (PCB).
- 3.2 Ballast shall be Underwriters Laboratories (UL) listed, Class P and Type 1 Outdoor; and Canadian Standards Association (CSA) certified where applicable.
- 3.3 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.4 Ballast shall comply with ANSI C82.11 where applicable.
- 3.5 Ballast shall comply with applicable requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, for Non-Consumer equipment.
- 3.6 Ballast shall comply with UL Type CC rating.
- 3.7 Ballast shall comply with NEMA 410 for in-rush current limits.

Section IV - Other

- 4.1 Ballast shall be manufactured in a factory certified to ISO 9001 Quality System Standards.
- 4.2 Ballast shall carry a five-year warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 70C. Ballasts with a "90C" designation in their catalog number shall also carry a three-year warranty at a maximum case temperature of 90C.
- 4.3 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market.

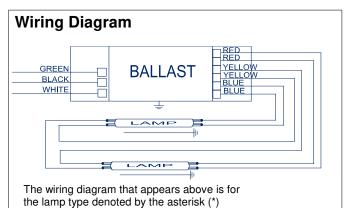


Revised 06/03/13



TM .	ICN-2S54-90C-T@277		
	Brand Name	CENTIUM T5	
	Ballast Type	Electronic	
ATADVANCE	Starting Method	Programmed Start	
TRANSFORMER CO.	Lamp Connection	Series	
Electrical Specifications	Input Voltage	120-277	
<u> </u>	Input Frequency	50/60 HZ	
	Status	Active	

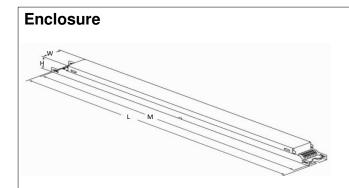
Lamp Type	Num. of	Rated Lamp Watts	Min. Start Temp (F/C)	Input Current (Amps)	Input Power (ANSI	Ballast Factor	MAX THD	Power Factor	MAX Lamp Current Crest	B.E.F.
	Lamps				Watts)		%		Factor	
F54T5/HO	1	54	-20/-29	0.23	62	1.04	10	0.97	1.7	1.68
* F54T5/HO	2	54	-20/-29	0.42	115	1.00	10	0.98	1.7	0.87
F54T5/HO/44W	1	44	-20/-29	0.18	50	1.04	10	0.97	1.7	2.08
F54T5/HO/44W	2	44	-20/-29	0.36	98	1.00	10	0.98	1.7	1.02
F54T5/HO/49W	1	49	-20/-29	0.21	57	1.04	10	0.97	1.7	1.82
F54T5/HO/49W	2	49	-20/-29	0.38	104	1.00	10	0.98	1.7	0.96
FC12T5/HO	1	55	-20/-29	0.21	58	0.92	10	0.97	1.7	1.59
FC12T5/HO	2	55	-20/-29	0.39	108	0.88	10	0.98	1.7	0.81
FT36W/2G11	1	36	-20/-29	0.16	44	1.20	10	0.96	1.7	2.73
FT36W/2G11	2	36	-20/-29	0.29	81	1.16	10	0.98	1.7	1.43
FT50W/2G11	1	50	-20/-29	0.22	60	1.11	10	0.96	1.7	1.85
FT50W/2G11	2	50	-20/-29	0.39	109	1.03	10	0.98	1.7	0.94
FT55W/2G11	1	55	-20/-29	0.21	58	0.92	10	0.96	1.7	1.59
FT55W/2G11	2	55	-20/-29	0.38	105	0.90	10	0.98	1.7	0.86



Standard Lead Length (inches)

	in.	cm.
Black	0	0
White	0	0
Blue	0	0
Red	0	0
Yellow	0	0
Gray		0
Violet		0

	in.	cm.
Yellow/Blue		0
Blue/White		0
Brown		0
Orange		0
Orange/Black		0
Black/White		0
Red/White		0



Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
14.17 "	1.18 "	1.06 "	13.78 "
14 17/100	1 9/50	1 3/50	13 39/50
36 cm	3 cm	2.7 cm	35 cm







Revised 06/04/13



1014 200+ 3	100 16211
Brand Name	CENTIUM T5
Ballast Type	Electronic
Starting Method	Programmed Start
Lamp Connection	Series
Input Voltage	120-277
Input Frequency	50/60 HZ
Status	Active

ICN-2S54-90C-T@277

Notes:

Section I - Physical Characteristics

- 1.1 Ballast shall be physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable.
- 1.2 Ballast shall be provided with integral leads or poke-in wire trap connectors color-coded per ANSI C82.11.

Section II - Performance

- 2.1 Ballast shall be Programmed Start.
- 2.2 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power.
- 2.3 Ballast shall operate from 50/60 Hz input source of ______ (120V through 277V, 347V or 347V through 480V) with sustained variations of +/- 10% (voltage and frequency).
- 2.4 Ballast shall be high frequency electronic type and operate lamps at a frequency above 42 kHz to avoid interference with infrared devices and eliminate visible flicker.
- 2.5 Ballast shall have a Power Factor greater than 0.98 for primary lamp.
- 2.6 Ballast shall have a minimum ballast factor of 1.0 for primary lamp application.
- 2.7 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less.
- 2.8 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage with primary lamp.
- 2.9 Ballast shall have a Class A sound rating.
- 2.10 Ballast shall have a minimum starting temperature of _____ {-18C (0F) or -29C (-20F)} for primary lamp. Consult lamp manufacturer for temperature versus light output characteristics.
- 2.11 Ballast shall provide Lamp EOL Protection Circuit.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.
- 2.13 Four-lamp ballast shall have (semi-independent or independent) lamp operation.

Section III - Regulatory

- 3.1 Ballast shall not contain any Polychlorinated Biphenyl (PCB).
- 3.2 Ballast shall be Underwriters Laboratories (UL) listed, Class P and Type 1 Outdoor; and Canadian Standards Association (CSA) certified where applicable.
- 3.3 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.4 Ballast shall comply with ANSI C82.11 where applicable.
- 3.5 Ballast shall comply with applicable requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, for Non-Consumer equipment.
- 3.6 Ballast shall comply with UL Type CC rating.
- 3.7 Ballast shall comply with NEMA 410 for in-rush current limits.

Section IV - Other

- 4.1 Ballast shall be manufactured in a factory certified to ISO 9001 Quality System Standards.
- 4.2 Ballast shall carry a five-year warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 70C. Ballasts with a "90C" designation in their catalog number shall also carry a three-year warranty at a maximum case temperature of 90C.
- 4.3 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market.



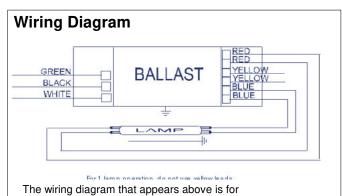


Revised 06/04/13



ICN-2S54-90C-T@277				
Brand Name	CENTIUM T5			
Ballast Type	Electronic			
Starting Method	Programmed Start			
Lamp Connection	Series			
Input Voltage	120-277			
Input Frequency	50/60 HZ			
Status	Active			

Lamp Type	Num. of	Rated Lamp Watts	Min. Start Temp (F/C)	Input Current (Amps)	Input Power (ANSI	Ballast Factor	MAX THD	Power Factor	MAX Lamp Current Crest	B.E.F.
	Lamps				Watts)		%		Factor	
* F54T5/HO	1	54	-20/-29	0.23	62	1.04	10	0.97	1.7	1.68
F54T5/HO	2	54	-20/-29	0.42	115	1.00	10	0.98	1.7	0.87
F54T5/HO/44W	1	44	-20/-29	0.18	50	1.04	10	0.97	1.7	2.08
F54T5/HO/44W	2	44	-20/-29	0.36	98	1.00	10	0.98	1.7	1.02
F54T5/HO/49W	1	49	-20/-29	0.21	57	1.04	10	0.97	1.7	1.82
F54T5/HO/49W	2	49	-20/-29	0.38	104	1.00	10	0.98	1.7	0.96
FC12T5/HO	1	55	-20/-29	0.21	58	0.92	10	0.97	1.7	1.59
FC12T5/HO	2	55	-20/-29	0.39	108	0.88	10	0.98	1.7	0.81
FT36W/2G11	1	36	-20/-29	0.16	44	1.20	10	0.96	1.7	2.73
FT36W/2G11	2	36	-20/-29	0.29	81	1.16	10	0.98	1.7	1.43
FT50W/2G11	1	50	-20/-29	0.22	60	1.11	10	0.96	1.7	1.85
FT50W/2G11	2	50	-20/-29	0.39	109	1.03	10	0.98	1.7	0.94
FT55W/2G11	1	55	-20/-29	0.21	58	0.92	10	0.96	1.7	1.59
FT55W/2G11	2	55	-20/-29	0.38	105	0.90	10	0.98	1.7	0.86

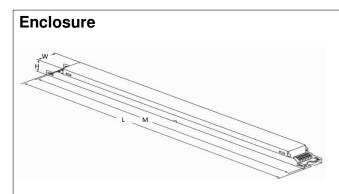


Standard Lead Length (inches)

the lamp type denoted by the asterisk (*)

	in.	cm.
Black	0	0
White	0	0
Blue	0	0
Red	0	0
Yellow	0	0
Gray		0
Violet		0

in.	cm.
	0
	0
	0
	0
	0
	0
	0
	in.



Enclosure Dimensions

OverAll (L)	Width (W)	Height (H)	Mounting (M)
14.17 "	1.18 "	1.06 "	13.78 "
14 17/100	1 9/50	1 3/50	13 39/50
36 cm	3 cm	2.7 cm	35 cm







Revised 06/04/13



1014 200+ 3	100 16211
Brand Name	CENTIUM T5
Ballast Type	Electronic
Starting Method	Programmed Start
Lamp Connection	Series
Input Voltage	120-277
Input Frequency	50/60 HZ
Status	Active

ICN-2S54-90C-T@277

Notes:

Section I - Physical Characteristics

- 1.1 Ballast shall be physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable.
- 1.2 Ballast shall be provided with integral leads or poke-in wire trap connectors color-coded per ANSI C82.11.

Section II - Performance

- 2.1 Ballast shall be Programmed Start.
- 2.2 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power.
- 2.3 Ballast shall operate from 50/60 Hz input source of ______ (120V through 277V, 347V or 347V through 480V) with sustained variations of +/- 10% (voltage and frequency).
- 2.4 Ballast shall be high frequency electronic type and operate lamps at a frequency above 42 kHz to avoid interference with infrared devices and eliminate visible flicker.
- 2.5 Ballast shall have a Power Factor greater than 0.98 for primary lamp.
- 2.6 Ballast shall have a minimum ballast factor of 1.0 for primary lamp application.
- 2.7 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less.
- 2.8 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage with primary lamp.
- 2.9 Ballast shall have a Class A sound rating.
- 2.10 Ballast shall have a minimum starting temperature of _____ {-18C (0F) or -29C (-20F)} for primary lamp. Consult lamp manufacturer for temperature versus light output characteristics.
- 2.11 Ballast shall provide Lamp EOL Protection Circuit.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.
- 2.13 Four-lamp ballast shall have (semi-independent or independent) lamp operation.

Section III - Regulatory

- 3.1 Ballast shall not contain any Polychlorinated Biphenyl (PCB).
- 3.2 Ballast shall be Underwriters Laboratories (UL) listed, Class P and Type 1 Outdoor; and Canadian Standards Association (CSA) certified where applicable.
- 3.3 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.4 Ballast shall comply with ANSI C82.11 where applicable.
- 3.5 Ballast shall comply with applicable requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, for Non-Consumer equipment.
- 3.6 Ballast shall comply with UL Type CC rating.
- 3.7 Ballast shall comply with NEMA 410 for in-rush current limits.

Section IV - Other

- 4.1 Ballast shall be manufactured in a factory certified to ISO 9001 Quality System Standards.
- 4.2 Ballast shall carry a five-year warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 70C. Ballasts with a "90C" designation in their catalog number shall also carry a three-year warranty at a maximum case temperature of 90C.
- 4.3 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market.





Revised 06/04/13