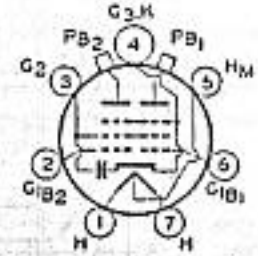
832A

TWIN BEAM POWER TUBE



Heater-cathode type having mid-tapped heater used as rf power amplifier and oscillator. May be used with full input up to 200 Mc. For operation at 250 Mc, plate voltage and plate input should be reduced to 89 per cent of maximum ratings. Class C Telegraphy maximum plate dissipation (per tube), CCS 15 watts, ICAS 20 watts. Requires Septar seven-contact socket and may be operated in any position. OUTLINE 12, *Outlines* Section. Plates show no color when tube is operated at maximum CCS or ICAS ratings.

	Series	*Parallel*	
HEATER ARRANGEMENT			
HEATER VOLTAGE (AC/DC)	12.6	6.3	volts

Heater Current	0.8	1.6	amperes
Transconductance (Each unit)*	3500		μmhos
Mu-Factor, Grid No.2 to Grid No.1 (Each unit)**	6.5		
Direct Interelectrode Capacitances (Each unit):[a]			
Grid No.1 to plate	0.07 max		μμf
Grid No.1 to cathode, grid No.3, grid No.2, and heater mid-tap	8.0		μμf
Plate to cathode, grid No.3, grid No.2, and heater mid-tap	3.8		μμf
Grid No. 2 to cathode (including internal Grid-No. 2 bypass capacitor)	55		μμf

* Plate volts, 250; grid-No.2 volts, 135; plate milliamperes, 30.
** Plate and grid-No.2 volts, 250; plate milliamperes, 30.
[a] With external shield in plane of seal flange.

PLATE-MODULATED PUSH-PULL RF POWER AMPLIFIER—Class C Telephony

Maximum Ratings:	*CCS*	*ICAS*	
DC Plate Voltage	600 max	600 max	volts
DC Grid-No.2 Voltage	250 max	250 max	volts
DC Grid-No.1 Voltage	-175 max	-175 max	volts
DC Plate Current	75 max	95 max	ma
DC Grid-No.1 Current	6 max	6 max	ma
Plate Input	22 max	36 max	watts
Grid-No.2 Input	3.4 max	5 max	watts
Plate Dissipation	10 max	15 max	watts
Peak Heater-Cathode Voltage:			
Heater negative with respect to cathode	100 max	100 max	volts
Heater positive with respect to cathode	100 max	100 max	volts
Bulb Temperature	200 max	200 max	°C

Typical Operation:				
DC Plate Voltage	425	600	600	volts
DC Grid-No.2 Voltage♣	200	200	200	volts
From series resistor of	14000	25000	20000	ohms
DC Grid-No.1 Voltage♢	-60	-65	-70	volts
From grid-No.1 resistor of	25000	25000	23000	ohms
Peak RF Grid-No.1-to-Grid-No.1 Voltage	140	150	160	volts
DC Plate Current	52	36	60	ma
DC Grid-No.2 Current	16	16	20	ma
DC Grid-No.1 Current (Approx.)	2.4	2.6	3	ma
Driving Power (Approx.)	0.15	0.18	0.21	watt
Power Output (Approx.)	16	17	26	watts

Maximum Circuit Values (CCS or ICAS conditions):		
Grid-No.1-Circuit Resistance	25000 max	ohms

♣ Obtained preferably from separate source modulated along with the plate supply or from the modulated plate supply through series resistor of value shown.
♢ Obtained from grid-No.1 resistor of value shown or from a combination of grid-No.1 resistor with either fixed supply or cathode resistor.

PUSH-PULL RF POWER AMPLIFIER AND OSCILLATOR—Class C Telegraphy
and
PUSH-PULL RF POWER AMPLIFIER—Class C FM Telephony

Maximum Ratings:	*CCS*	*ICAS*	
DC Plate Voltage	750 max	750 max	volts
DC Grid-No.2 Voltage	250 max	250 max	volts
DC Grid-No.1 Voltage	-175 max	-175 max	volts
DC Plate Current	90 max	115 max	ma
DC Grid-No.1 Current	6 max	6 max	ma
Plate Input	36 max	50 max	watts
Grid-No.2 Input	5 max	5 max	watts
Plate Dissipation	15 max	20 max	watts
Peak Heater-Cathode Voltage:			
Heater negative with respect to cathode	100 max	100 max	volts
Heater positive with respect to cathode	100 max	100 max	volts
Bulb Temperature	200 max	200 max	°C

Typical Operation:				
DC Plate Voltage	500	750	750	volts

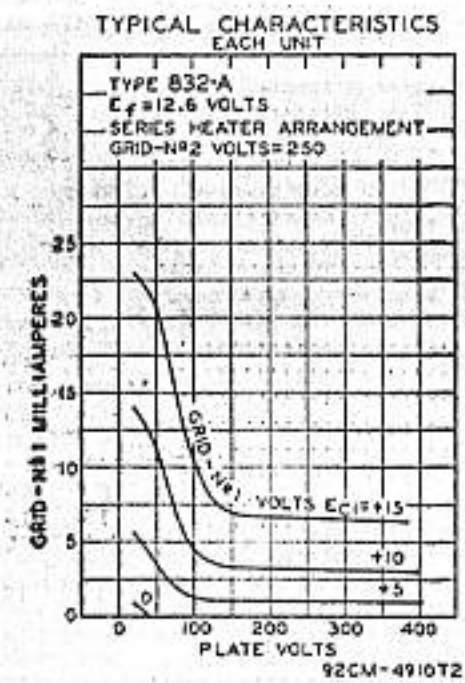
DC Grid-No.2 Voltage*	200	200	200	volts
From series resistor of	21000	37000	25000	ohms
DC Grid-No.1 Voltage^	-65	-65	-50	volts
From grid-No.1 resistor of	25000	25000	12500	ohms
From cathode resistor of	730	1000	550	ohms
Peak RF Grid-No.1-to-Grid-No.1 Voltage	150	150	130	volts
DC Plate Current	72	48	65	ma
DC Grid-No.2 Current	14	15	22	ma
DC Grid-No.1 Current (Approx.)	2.6	2.8	4.0	ma
Driving Power (Approx.)	0.18	0.19	0.24	watt
Power Output (Approx.)	26	26	35	watts

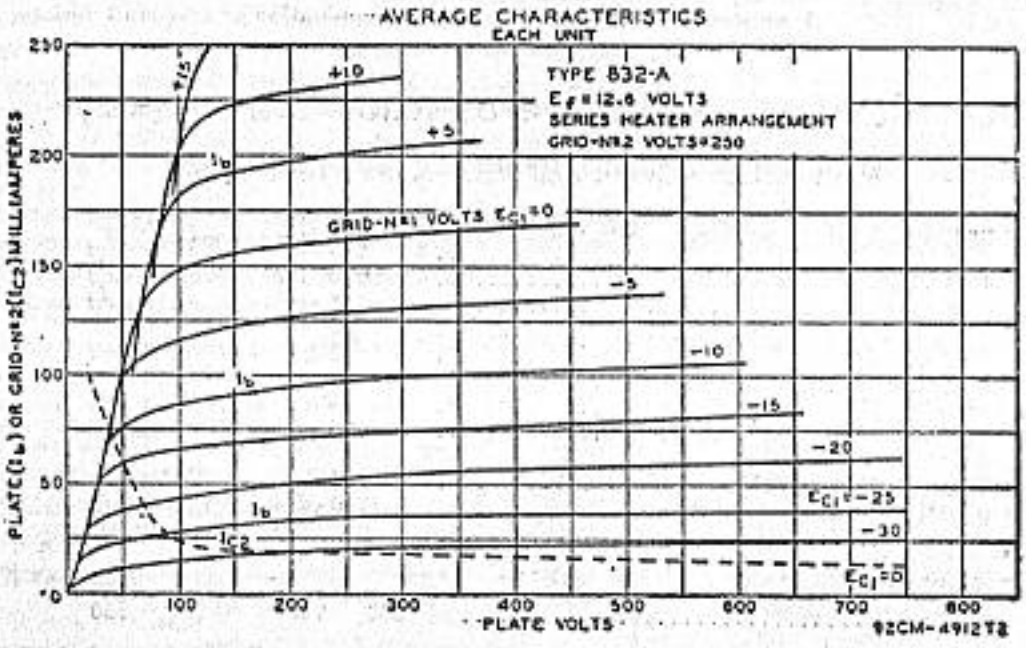
Maximum Circuit Values (CCS or ICAS conditions):

Grid-No.1-Circuit Resistance	25000 max	ohms

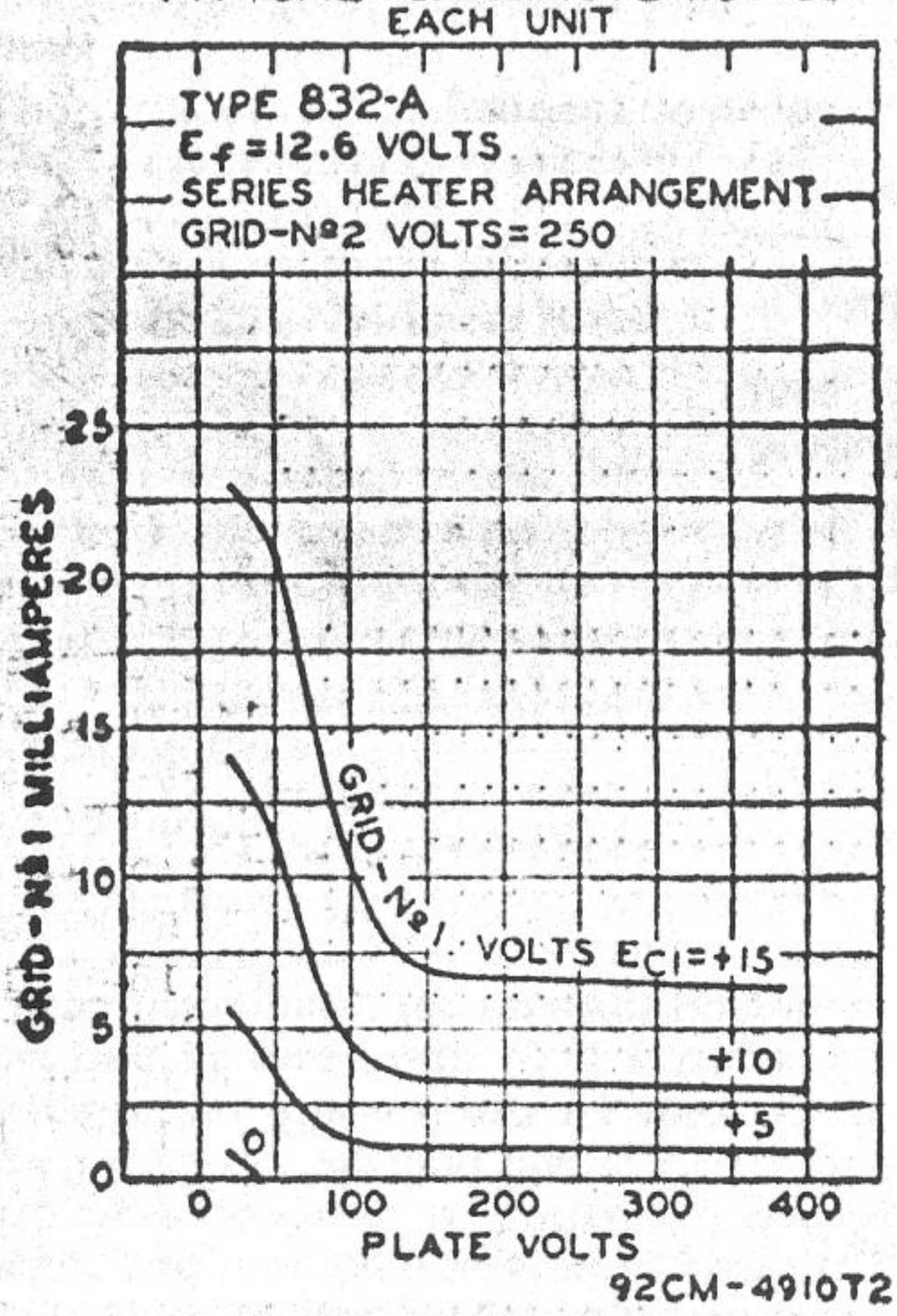
* Obtained from separate source, from plate-voltage supply with a voltage divider, or from series resistor of value shown. The grid-No.2 voltage must not exceed 600 volts under key-up conditions.

^ Obtained from fixed supply, by grid-No.1 resistor, by cathode resistor, or by combination methods.





TYPICAL CHARACTERISTICS
EACH UNIT



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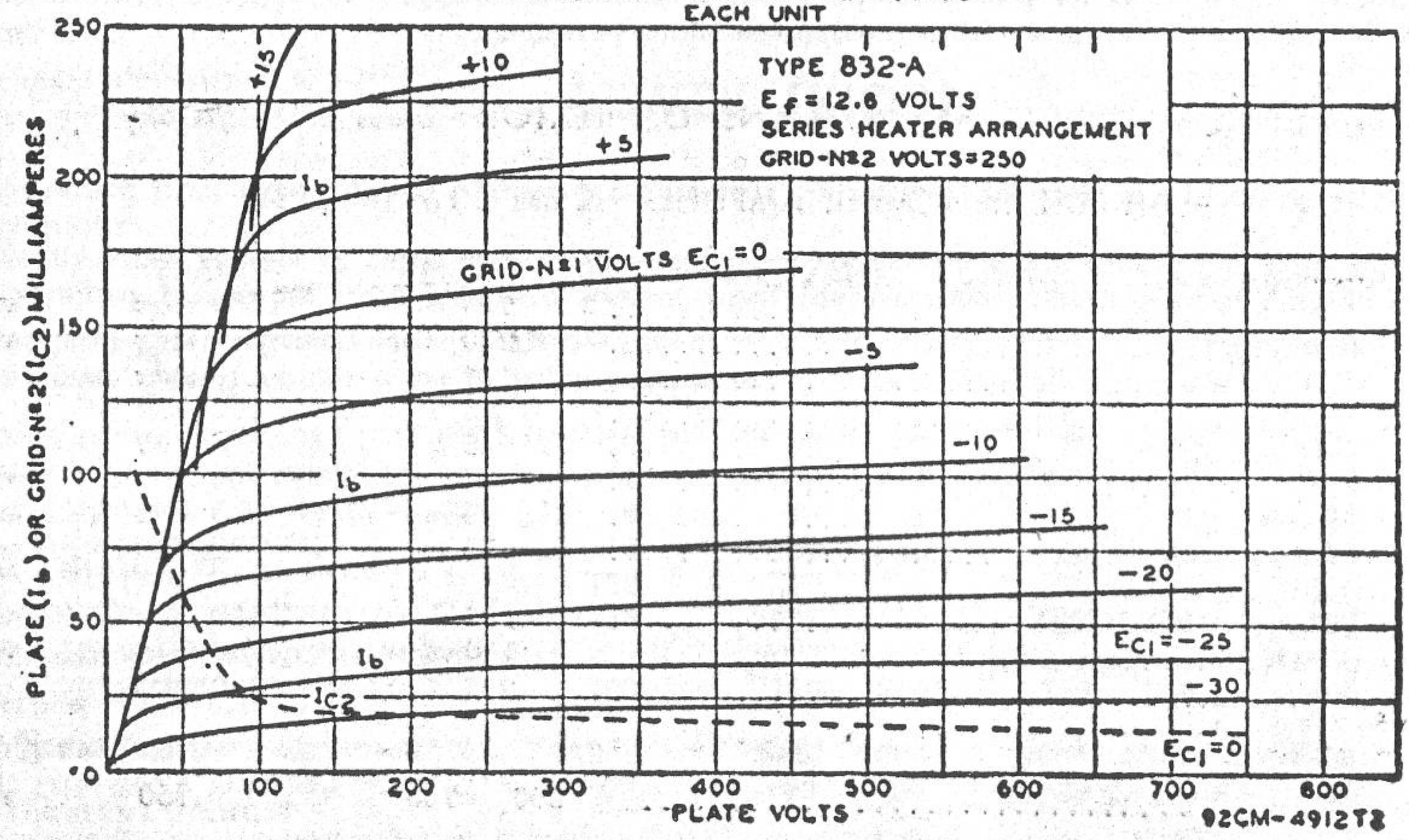
AVERAGE CHARACTERISTICS
EACH UNIT



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