The following information covers
Forty Modern Cars for Street Railway Service in Iowa State Capital
Single End Control

GENERAL INFORMATION:

Seating Capacity: 50 in double-bucket type leather upholstered seats.
Seat Spacing: 31" Seat Width: 36" Aisle width: 23½"
Total weight of car, equipped but without load: 36,000 lb.
Length over bumpers: 42'-0"
Width over Side Sheathing: 8'-5"
Height, top of rail to top of roof: 10'-1½"
Spacing of truck centers: 19'-0"
Type of truck: Cummings #64, wheelbase 5'-4", track gage 4'-8½"
Wheel diameter: (Nominal) 26"

MOTORS & CONTROL:

Motors: Four General Electric 247, 40 hp. each, with field tap.
Control: General Electric K-75, with line breaker and field tapper.
Line Voltage: (Nominal) 600 v. DC
Gear Ratio: 58:15

AIR BRAKES:

Straight air, with full safety devices. GE Co. type CP-27 compressor.

MISCELLANEOUS:

Lighting: Series lighting, 30 v. lamps, 20 in series, in dome fixtures.
Heating: Electric heat, thermostatically controlled, total capacity 15 kw.
Door control: Pneumatic, rear door treadle operated.

CONTINUED ON NEXT PAGE
SERVICE CONDITIONS: The Des Moines Railway serves a total population of approximately 160,000, including, in addition to Des Moines, the cities of West Des Moines, Fort Des Moines and Urbandale, with street car, trolley bus and gas bus facilities as follows:

<table>
<thead>
<tr>
<th></th>
<th>STREET CAR</th>
<th>TROLLEY BUS</th>
<th>GAS BUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cars</td>
<td>100</td>
<td>31</td>
<td>37</td>
</tr>
<tr>
<td>Number of routes</td>
<td>8</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Total round-trip</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>route miles</td>
<td>96</td>
<td>33</td>
<td>75</td>
</tr>
</tbody>
</table>

In Des Moines, as in the other principal cities of the United States, the street car is the backbone of the local transit system. During 1939 the Des Moines Railway operated 6,212,810 car miles and carried a total of 21,378,840 passengers. Car service is operated at a schedule speed of about 12 mph. and at headways of three to fifteen minutes.

The property is operated in coordination with the Des Moines & Central Iowa Railroad, which owns connecting interurban lines.

POWER SUPPLY: One of the few companies to generate its own power, the railway has a steam generating plant on the Des Moines River at East 4th and Maple Streets. This plant has a capacity of 14,750 kw. and furnishes AC power at 4400 v. 25 cycles to 8 full automatic substations, which step it down to 600 v. DC at the trolley. This was the first city railway in the country to make extensive use of automatic substations.

CAR EQUIPMENT: In addition to 40 cars of the modern type described the company has in service a number of cars of older designs, but all double-truck single end cars, with front entrance and exit and rear treadle-exit. One-man operation was introduced on July 4, 1930 and is now used in all service.

<table>
<thead>
<tr>
<th>CAR SERIES</th>
<th>No's.</th>
<th>Quantity</th>
<th>Year Built</th>
</tr>
</thead>
<tbody>
<tr>
<td>200s</td>
<td>10</td>
<td>1929</td>
<td></td>
</tr>
<tr>
<td>300s</td>
<td>15</td>
<td>1912</td>
<td></td>
</tr>
<tr>
<td>400s</td>
<td>25</td>
<td>1913</td>
<td></td>
</tr>
<tr>
<td>600s</td>
<td>10</td>
<td>1924</td>
<td></td>
</tr>
<tr>
<td>700s</td>
<td>40</td>
<td>1930</td>
<td></td>
</tr>
</tbody>
</table>

Series 200, 600 and 700 built by Cummings Car Co. at Paris, Ills.
Series 300 and 400 built by the American Car Co. at St. Louis, Mo.

DATA & PHOTOS COURTESY OF
Des Moines Railway Company
(Exterior by R. D. Kimmel)
CERA Data Sheet
July 14, 1940

* The latest color scheme, as indicated on the 702 illustrated, is green and cream with aluminum roof; interior in shades of green with green leather seats. The first car with this modern paint job took the rails May 11, 1940.